

Reflections on Composing for Balinese *Gendér Wayang: The Birth of Kala*

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This paper focuses on a concert of Balinese *gendér wayang* in London by the group Segara Madu on 19 March 2012. Both this concert and a piece within it were entitled *The Birth of Kala*, and the whole event consisted of a number of different elements, including traditional pieces from the village of Sukawati, Balinese stories of the demon Kala told by narrator Tim Jones, visual elements and new compositions. The project was collaborative, with continuous input from group members and reworking in rehearsal.

In order to describe and analyze the piece *The Birth of Kala* itself, it will first be necessary to give some background information about the ensemble. I will then present some of the elements of the concert separately and bring them together in the hope that they will shed light on one another. These various elements comprise pieces for the Balinese *gendér wayang* ensemble—in particular, *Sudamala* (named after a series of Balinese stories of the same title)—and a new composition of mine for *gendér* entitled *The Birth of Kala*, which I will outline and analyze. The analytical findings will be related to my compositional choices and influences, and the work will be located within the context of new composition for gamelan. References will be made to the score and also to a two-part video recording of the entire concert, which can be found on the SOAS music department's YouTube site (http://www.youtube.com/watch?v=0EH87ay_f8c and <http://www.youtube.com/watch?v=l-a8BQen5LI>).

Figure 1. Balinese *Gendér Wayang*. Photo by Nicholas Gray.



THE *GENDÉR WAYANG* ENSEMBLE

First, I will briefly describe the *gendér wayang* ensemble. In previous publications (Gray 2006, 2010, 2011), I have explored the nature of composition in traditional contexts for *gendér wayang* and the variety of compositional procedures along a continuum from improvised to large-scale pre-composition, following Nettl (1974, 1982, 2005). *Gendér wayang* is the name given to a small quartet (or sometimes duo) of bronze metallophones, used in Bali to accompany the shadow play (*wayang kulit*), a sacred drama based on stories from the ancient Indian epics Mahabharata and Ramayana.¹ It also serves as a ritual ensemble that plays for life-cycle ceremonies, temple festivals, purification rituals and cremations as part of Bali's Hindu heritage. The playing technique in this miniature gamelan ensemble is very demanding, as players must damp the ringing notes with their wrists while executing high-speed interlocking figuration between the instruments. The scale is an anhemitonic pentatonic scale related to the Javanese *sléndro*, and the bronze

¹ For in-depth descriptions of Balinese *wayang*, see McPhee 1936 and Hobart 1987. For *gendér wayang*, see McPhee 1966; Gold 1992, 1998; and Gray 1990, 1992, 2010, 2011.

keys are suspended above bamboo resonating tubes, each carefully tuned to the key directly above.² This construction augments the resonant sound of the instrument and contributes to its characteristic timbre.

The figure of the shadow-puppeteer, *dalang*, is pivotal in understanding the relationship between the traditional repertoire, the mythological stories and the new composition presented in this concert. I have described elsewhere the outline of a *wayang kulit* (shadow play) performance and how the *gendér wayang* music articulates its structure (Gray 2006, 2011). The traditional performing group consists of one *dalang* puppeteer, two assistants who sort and hand over the puppets, and four *gendér* players who sit behind the *dalang*. Nighttime performances generally last around three hours, and stories are drawn from episodes of the Mahabharata or, more rarely, the Ramayana.

Besides regular entertainment performances, there are two ritual forms of *wayang* that deserve special mention here. *Wayang lemah* performances take place during the day at festivals or life-cycle ceremonies. The *dalang* for this ritual *wayang* must have been initiated as a priest, and the performance is largely ignored by people at the ceremony, being regarded as ritual rather than entertainment. The other ritualized *wayang* is *wayang sudamala* (“freed from evil”), the performance of which lifts the curse from a child born during a particular week (the name of the week is also *wayang*), who is at danger from the demon Kala.³ It may also help those suffering from other spiritual dangers. The ritual at the end of the nighttime *wayang sudamala* is conducted by an initiated *dalang*-priest who

² An example of *gendér wayang* tuning in cents is given in Gray 2011, 251–52. For a description of Javanese *sléndro*, see, for instance, Brinner 2007.

³ *Sudamala* is also the name of a *kidung* poem involving the goddess Durga who is freed from her demonic form by Sadewa, one of the Pandawa brothers from the Mahabharata epic (see Zoetmulder 1974, 444).

uses the most sacred puppets to create a purifying holy water.⁴

SUDAMALA, “FREED FROM EVIL”

At this point, I will consider the *gendér wayang* piece *Sudamala* (“Freed from evil”). *Sudamala* is the final piece we played in the concert, and is used to accompany the ritual at the end of a *wayang sudamala* while the *dalang* is making the purificatory holy water. As I have described elsewhere (Gray 2006, 2011), this piece is held by many musicians to be especially sacred in character, with its slow, winding, and revolving theme. Example 1 shows that the theme is a composite of the two interlocking *gendér* parts, *polos* and *sangsih*.

Played by my group Segara Madu in the concert, this theme can be heard at 30:00 in the video, part 2. It follows the piece *Tabuh Gari* (which starts at 26:10) and a connecting introduction (at 28:04). This particular version of *Sudamala* was taught to me

Example 1. *Sudamala* Main Theme



⁴ For a description of this ritual, see Hobart 1987, 135.

by my teacher, the late I Wayan Locéng of the village of Sukawati in south Bali. In concert, as in many recorded versions, we play it as an extension of the piece *Tabuh Gari* which brings *wayang* performances to a close; this is because the two pieces follow one another in the *sudamala* ritual, although they are normally separated by a gap while the offerings for the ritual are prepared. In the following examples, the *polos* part is notated on the lower staff, and the *sangsih* part on the staff above.

My teacher, I Wayan Locéng, also devised two variation sections based on this basic theme (which I discuss in Gray 2011, 176). These themes can be heard in the video, part 2, at 32:15 for the first variation and 34:04 for the second variation (see Examples 2 and 3). These variations keep the structure of the basic theme, but the first makes the texture denser through left-hand figuration, while the second develops a related melodic pattern in the left hands. This type of variation influenced my own development of themes in *The Birth of Kala*.

Example 2. *Sudamala*, First Variation Section

Example 3. *Sudamala*, Second Variation Section



THE STORIES OF KALA

I will now relate *Sudamala* to a series of Balinese legends, briefly summarizing the stories that were presented in the first half of the concert by storyteller Tim Jones. They are compiled from various sources—mostly from my *gendér wayang* teacher, I Wayan Locéng, but supplemented by other sources, particularly Hooykaas 1973.

Story 1 (video, part 1, from 09:15) tells of how the god Siwa and goddess Uma create a son called Raré Kumara. Uma, becoming angry with the boy's incessant crying, descends to earth and becomes a terrifying demon, creating dangerous spirits through meditation. Siwa also descends, and the anger of the two deities' meeting causes calamities. The gods Brahma, Wisnu and Iswara then descend to relieve the land by respectively becoming a red mask, a white mask and the mythological beast *barong*. Siwa's dancing causes earthquakes, so the gods create the first shadow puppet play to finally transform Siwa and Uma into their benevolent forms. Since then, shadow puppeteers have had special gifts, including the ability to create purifying holy water.

In Story 2 (video, part 1, from 16:50), Siwa and Uma are flying on the bull Nandi when Siwa, overcome with desire, lets a drop of his sperm fall into the sea. This forms a giant egg from which emerges the horrifying demon, Kala. Kala roars with loneliness and looks for his parents. Siwa, asking Kala to break his own tusk, tells him of his parentage, gives him the right to devour sinners, and informs him that he can be purified into a benevolent form by the performance of offering rituals.

Story 3 (video, part 1, from 26:30) tells of the riddle put to Kala. Hooykaas (1973, 165) describes how Kala emerges from the mountain crystal with a terrible aspect and thundering voice. Siwa allows Kala to install himself at the crossroads to devour people moving about at noon as well as those asleep at inappropriate times. Uma takes pity on the suffering humans and persuades Siwa to intervene. They challenge Kala with a riddle which he is unable to answer, and consequently Kala is only allowed to eat people under very specific circumstances.

Story 4 (video, part 1, from 31:55) tells of how Siwa has two sons: Raré Kumara, a beautiful child, and Kala, a terrible demon. Realizing that Raré Kumara was born in the vulnerable week called *wayang* and can therefore be regarded as the demon's prey, Kala begins to pursue Raré Kumara. Siwa tries to protect Raré Kumara, as does the earthly king Mayasura, but Kala is relentless in his pursuit. Raré Kumara hides in the following places: a clump of untied *lalang* grass (a reed used for thatching), under a rice-granary, among tied-up bundles of wood, and in the uncovered hole of an oven. Kala discovers him in each of these places and curses humans who in the future will leave the items in those states. Finally, Raré Kumara finds a *wayang* performance in progress, and the *dalang* hides him inside one of the bamboo resonators of the *gendér wayang* instruments. Kala

appears, furious, and starts devouring the offerings for the performance. The *dalang* points out that by doing this, Kala is now in his debt, and the *dalang* refuses to surrender Raré Kumara. The *dalang* states that, in the future, puppeteers will be able to save anyone threatened by Kala through performing *wayang sudamala*, followed by the *sudamala* ritual to create protective holy water.

It should be clear by now why the piece *Sudamala* is the end point of our concert, which was conceived as an exploration of the nature of the instruments: the latter's full protective power is most clearly demonstrated by the legend of Raré Kumara hiding inside the bamboo resonators, leading to the institution of the *sudamala* ritual, for which the piece *Sudamala* is indispensable.

OUTLINE OF *THE BIRTH OF KALA*

My composition *The Birth of Kala* was presented in the second half of the concert, and is intended to be a “reading” of the stories on a different, perhaps more abstract level. Before attempting an analysis, I will give a general outline of the piece. The notation system that I have adopted is a prescriptive notation based mostly on Javanese-style cipher notation, which aims to enable performers to recreate the piece in conjunction with the video of the first performance. However, unlike notation for Javanese gamelan, in which emphasis occurs on the last beat of a four-note group, here I have notated the music so that the start of each pattern falls on the first note of a note group. This format is chosen to convey *Birth*'s modular structures more easily; my notation does not imply a strongly accented downbeat. The numbers refer to the *gendér* notes from low to high (or, rather, from big to small, in Balinese terms), having been chosen to correspond roughly with

Javanese *sléndro gendér* tuning (though Javanese *sléndro* is generally lower in overall pitch); thus, from bottom to top: 2 3 5 6 1 2 3 5 6 1.

It must be emphasized that different sets of *gendér* will have very different tunings in their realization of the anhemitonic pentatonic *sléndro* scale. The two larger instruments of my set are tuned approximately from the F# below middle C upwards, as follows: F#, G#, B, C#, E, and then a higher octave of the same notes (i.e., F# corresponds to note 2, G# to note 3, etc.). The small pair of *gendér* is tuned one octave higher than the large pair. One of each pair is tuned slightly lower than its partner in order to produce acoustic beats. In some sections of the piece, the *gendér* are divided into the traditional pairs, *polos* (basic) and *sangsih* (differing), which interlock to create patterns. In these cases, the simultaneous *sangsih* part is notated above the *polos*, because it generally employs higher notes.

Birth begins with an introduction in which repeated, accelerating notes are passed between the instruments in a circular fashion. The motion and choice of notes themselves were influenced by the Balinese concept of *nawasanga*—the nine directions (eight plus the center; see Example 4 and video part 2, 06:10 ff.), in the melodic motion 6, 1, 3, 5, 2.⁵ As three of the *gendér* continue a tremolo drone on the lowest notes, a violin solo is added (see Example 5; video part 2, 07:02 ff.).⁶

⁵ The image of *nawasanga* (eight directions with a center) mirrors the emphasis on the crossroads in the Kala stories. I will discuss this further later in this article but here, I would like to draw attention to the dynamic rather than static nature of this image.

⁶ After some experimentation, I found it easiest to tune the violin in the usual fifths, but with the bottom G-string tuned to the lowest note of the *gendér* (on my instruments somewhere between F and F#). As a violinist trained to feel for the “correct” pitch, and despite my long experience of playing gamelan, it was still strangely disconcerting for me to be reminded that in Balinese *gendér wayang* there is no single “pitch” to tune to, as pairs of instruments carry minutely differing pitches to enable acoustic beating. When the violin reappears at the end of part 2, it took me a while to work out the best way to integrate the violin into the ensemble. Tuning to the *sléndro* notes 2, 6, 3 and high 1 proved impossible as my fingers became totally lost on the violin fingerboard, so I retained the tuning of the lowest G-string adjusted down to fit the lowest

Example 4. *The Birth of Kala* Score, p. 2

Part 1: Section A, Introduction

666666666 (accel. each time)	22222222222222222222222222222222
iiiiiiiiiii	22222222222222222222222222222222
333333333	22222222222222222222222222222222
555555555	2222222222

666666666	22222222222222222222222222222222
iiiiiiiiiii	22222222222222222222222222222222
333333333	22222222222222222222222222222222
555555555	2222222222

6 66666666 (tremolo)	2 22222222222222222222222222222222
i iiiiiiiiii (tremolo)	2 22222222222222222222222222222222
3 33333333 (tremolo)	2 22222222222222222222222222222222
5 55555555 (tremolo)	2 22222222

NB as the small *gendér* will play in their lower octave here, their gliss. will be inverted: \wedge

All end on tremolo on octave 2/2

Example 5. *The Birth of Kala* Score, p. 3

Section B

tune violin G string to lowest note of gender and in 5ths up from this

Violin

Genders Tremolo drone throughout this violin solo, on note 2 octave, here notated as g to match violin bottom string but likely to be lower in pitch. Some genders use double bass/cello bows to sound various notes ad lib.

15

25

31 repeat ad lib repeat ad lib repeat ad lib

39

46

gendér note 2. This tuning process meant that the violin passage had to be transposed up (more or less) a semitone from my original notation to fit the stretched octaves of the *gendér*. In general, I adopted an intuitive and adaptive approach to tuning, as opposed to the mathematically calculated microtonal exactitude of some gamelan composers, which seems somewhat alien to Balinese and Javanese thinking about pitch (see Perlman 1994).

As the violin solo ends and the drone fades out, each *gendér* instrument independently starts a descending pattern, using dampened “click-stops” to give an effect of gathering rainfall (on the video, part 2, from 09:14). The patterns descend towards a chaotic drone, out of which emerges a left-hand ostinato pattern based on a *gendér wayang* style known as *batél*, which used to accompany scenes of violence in *wayang* (see Example 6; video part 2, 10:40 ff).⁷ This brings the first part of *Birth* to a close; observe the main tonal center, based on the lowest note 2 of the *gendér*.

Example 6. *The Birth of Kala* Score, pp. 4–5

Section C

Click-stopped, free rhythm (like bell ringing), *gendér* staggered as follows: small ones start slowly (like rain drops) moving from module to module in descent, large ones start as small ones reach their lower octave, gathering pace and ferocity like a storm breaking to a tremolo drone at the end using many low notes.

1651653 / 6531653 / 5326532 / 3215321 / 2163216 / 1652165 / 6531653 / 5326532

2\2 drone sustained while other *gendér* ‘bubble up’.

Section D

Leader moves off into *batél* (fighting music style) section from this, as follows:

sangsih: (transition, triplets) 3X: 3X:

| 1̣515 1515 |	iii 555 666	| .1̣.6̣.1̣.6̣.1̣.6̣ |	| .1̣.6̣.1̣.6̣.1̣.6̣ |
| 2̣323 23.3 |	222 333 555	| 6̣.1̣.2̣.3̣.2̣.1̣ |	| 6̣.5̣.3̣.2̣.6̣.5̣ |

polos: (transition, triplets) 3X: 3X:

| 3535 3535 |	333 555 666	| .3̣.6̣.3̣.6̣.3̣.6̣ |	| .3̣.6̣.3̣.6̣.3̣.6̣ |
| 2̣323 23.3 |	222 333 555	| 6̣.1̣.2̣.3̣.2̣.1̣ |	| 6̣.5̣.3̣.2̣.6̣.5̣ |

| .1̣.6̣.1̣.6̣.1̣.6̣ |	iii 666 555	| 1̣515 1515 etc slowing down |	5235 2352 3523 5235 2352 3523	| several times
| 6̣.1̣.2̣.3̣.2̣.1̣ |	666 555 333	| 2̣323 23.3 |	2... 3... 2... 3... 2... 3...	
| .3̣.6̣.3̣.6̣.3̣.6̣ |	iii 666 555	| 3535 3535 |	12.1 .6̣12 .1.6̣ 12.1 .6̣12 .1.6̣	|
| 6̣.1̣.2̣.3̣.2̣.1̣ |	666 555 333	| 2̣323 23.3 |	2... 3... 2... 3... 2... 3...	

Small *gendér* add the following as slow *batél* gets louder:

| ..5. 5..5 |
| ..3. 3..3 |
| ii.i .ii. |
| 22.2 .22. |

Ends on 2/1/5 chord reiterated.

⁷*Batél* passages in *wayang* feature various short ostinatos which are often transposed (see Gray 2011, 140).

Example 7. *The Birth of Kala* Score, pp. 6–7

Part 2: pursuit

Overlapping modules: one player goes first, the rest pursue (fading in), the first player fades out and fades into the next module.

Module 1a:

i6.i	6.i6	.5.6	.5.5	.61.	
..6.	.6..	..5.	..3.	...1	

Module 1b:

.15.	.15.	.13.	.63.	
3..3	...3	3..3	...3	

Module 2a:

2.52	.52.	.252	.5.2	..25	
.1..	1..1	....	..1.	.1..	

Module 2b:

i5.i	.5.i	i5.i	.5.i	
..5.	..5.	..5.	..5.	

Module 3a:

2.2.	..2.	2.5.	..5.	..12	
...1	.1..	.1.1	.2.2	2...	

Module 3b:

ii.5	..23	55.i	.5.i	
....	56..	..5.	..5.	

Module 4a (start soft crescendo each time through this module – try not to coincide):

iii	666	555	333	22	..	666	555	333	222	11	..	
333	555	666	111	..	..	222	333	555	666	..	..

Module 4b (violin section 2 starts once this module is reached):

.5i5	.5i5	.i5	
5...	5...	5..	

Module 4c

.5i5	.5i5	.i5	
2...	2...	2..	

Ends tremolo 5//5, coinciding with last violin note

In the second part of *Birth* (see Example 7; video part 2, 13:00 ff.), the mood changes to a more delicate style at a higher pitch level, based mainly around notes 5 and 1. Separate but paired modules allow the music to evolve slowly: 1a, 1b, 2a, 2b, 3a, 3b, 4a, 4b, and 4c. One player starts each module, and is then joined by the others, using fade-ins and fade-outs to overlap. The violin joins in for the concluding passage (also modular in structure), which brings part 2 to a close over tremolo in the *gendér* (video part 2, 18:06 ff.). Broadly speaking, the tonal basis of this part is note 5 (approximately B in equal temperament). During the quiet pause before the third part of *Birth*, there is a brief spoken passage about the symbolism of *wayang* (adapted from Hooykaas 1973, 199).

Example 8. *The Birth of Kala* Score, pp. 9–10

Part 3:

A (medium tempo):

sangsih: (1st time, *sangsih* starts on beat with r.h. 6)

.5.6 .5.5 .3.5 .6.5 1.56	X2
..6. ..3. ..2. ..3. .3..	

polos:

3.32 1232 .165̣ .615̣ .612̣	X2
6... 3... 2...	

sangsih:

.5.6 .5.5 .3.5 .6.5 1.56	X2
..6. ..3. ..2. ..3. .3..	

polos:

3253 .253 .216̣ 5̣6̣15̣ .612̣	X2
6... 3... 2...	

Example 8 continued. *The Birth of Kala* Score, pp. 9–10

<i>sangsih:</i>	..
i.6 6..5 .6.5 .6.5 i.56	X2
..6. ..3. ..2. ..3. .3..	

<i>polos:</i>	
33.2 2.11 .22. 21.2 .612	X2 (second time, ends: .123)
6... 3... 2...	

<i>sangsih:</i>	..
.6.6 .6.6 .6.6 .6.5 i.56	X2
..6. ..3. ..2. ..3. .3..	

<i>polos:</i>	
5656 3..2 3216 .123 5656	X2
6... 3... 2...	

This whole section is repeated approximately 3 times, slowing down at the very end to change density/*irama* to lead into the next section.

The third and final part of *Birth* is slightly more conventional in terms of *gendér* style, with interlocking right hands over a slow-moving left-hand melody in a 10-beat cycle (see Example 8; video part 2, 19:02 ff.). Four versions of a theme are each repeated and the whole cycle is played three times. This section slows down in a manner akin to an *irama* change in Javanese gamelan, whereby the patterning doubles in frequency while the left-hand melody decelerates to twice as slow. The right-hand patterns of *polos* and *sangsih* travel in opposite directions, meeting and crossing over in the middle (“B” in Example 9; video part 2, 21:25 ff.).

The piece ends with a condensed coda (“C” in the score), featuring an incessant repeated left-hand note, and speeding up to bring the piece to a close (video part 2, 22:28). The tonal basis for the whole of part 3 is note 6 (approximately C#).

Example 9. *The Birth of Kala* Score, p. 11

B (slow):

sangsih:

..1 $\dot{6}$ 1.6 $\dot{1}$ 6.6 $\dot{1}$ 2.1 $\dot{2}$ 3.2 $\dot{3}$ 5.3 $\dot{5}$ 6.6 $\dot{5}$ 3.5 $\dot{3}$ 2.3 $\dot{2}$ 1.2 $\dot{1}$	
6... .. 3... .. 2... .. 5.5. 5.5.	repeats around 6 times
	+ + + +

polos:

.653 .532 .321 .216 .161 .616 .612 .123 .235 .356	
6... .. 3... .. 2... .. 5.5. 5.5.	repeats around 6 times
	+ + + +

C coda, starts slow then accel. and cresc. to end:

sangsih:

3.5. 1.6. 5.5. 1.1. 6.1. 6.5. 3.3. 5.6.	X4 ends 3
.3.3 .3.3 .3.3 .3.3 .3.3 .3.3 .3.3 .3.3	

polos:

6.1. 3.2. 1.5. 3.5. 6.3. 6.5. 3.6. 1.2.	X4 ends 6
.6.6 .6.6 .6.6 .6.6 .6.6 .6.6 .6.6 .6.6	

ANALYSIS OF *THE BIRTH OF KALA*

Having outlined the piece, I will now attempt to unpack further layers of meaning by focusing on separate groups of parameters. I am guided in this approach by Michael Tenzer’s analysis of *Oleg Tumulilingan*, in which his selection and application of parameters are grounded in knowledge of the tradition (Tenzer 2005). Following the discussion of the broad parameter groupings—(1) tempo, rhythm, timbre, dynamics and accentuation, (2) melody and figuration, (3) polyphonic aspects, (4) movement, visual imagery, color, and directional symbolism—I summarize the ethos derived from these composite parameters. During this analysis, I attempt to distance myself somewhat from my conscious compositional choices in order to see what emerges.

(1) Tempo, Rhythm, Timbre, Dynamics and Accentuation

Rather than describing a single parameter, I discuss the interaction of four elements traditionally regarded as important in Balinese music, though generally less privileged in Euro-American music and analysis. Notable exceptions to these prioritization include two articles by Andrew McGraw (2008a, 2008b) which analyze time in Balinese gamelan with special attention to its cognitive dimensions and input from Balinese musicians, as well as the Tenzer (2005) article mentioned above. In Table 1, I separate out and highlight some of the more prominent elements as they occur within the three main parts of *Birth*. The table is to be read downward, with a column for each of the three parts of the piece. Sections within part 1 are labeled A, B, C and D, while those in part 2 are referred to by their module number, and sections in part 3 are labeled A, B and C.

From Table 1, it can be seen that part 1 of the piece is concerned with what might be described as the “breaking up” of time, with accelerated click-stops, tremolos and violent *batél* textures all contributing to a sense of instability (more on “breaking” time later). A second type of texture is heard in the violin solo of part 1, with its bowing effects accompanied by the more “mellow” *gendér*. This latter texture prefigures the evenness of texture found in part 2, especially at the returns of the violin, although both textures seem anticipatory and restless rather than settled.

As highlighted in Table 1, part 2 of the piece, while maintaining a steady tempo, creates a sense of “flight” (“fugue” in its literal sense, perhaps) through the fading in and out of successive modules, as though it were seeking refuge or rest, and ends with uncertainty and anticipation. Table 1 shows that part 3 of the piece, in contrast, provides a

Table 1. Tempo, Rhythm, Timbre, Dynamics and Accentuation

PART 1 (06:10 on video 2)	PART 2 (13:00 on video 2)	PART 3 (19:02 on video 2)
<p>A) Accelerating click-stops rotating from instrument to instrument, then with glissandi - "breaking up" time (Example 4, page 2 of score). <i>Dynamics:</i> soft. <i>Texture:</i> shortness of individual notes contrasts with the extended drone/overlap effect of tremolo.</p>	<p>Module 1a (5 beats of 4 notes) and module 1b (4 beats of 4 notes). Lead player starts each module, fades after others have established it and introduces next module as a fade-in. This whole section is at an even tempo. The fading in and out of modules, however, gives a feeling of restlessness and change. <i>Dynamics:</i> medium. <i>Texture:</i> overlapping polyrhythmic cycles. Two beats = c.126 (speeding to c.132 by the end).</p>	<p>A) A medium-tempo theme in a cycle of five four-beat groups. This is repeated and then cycled in three variations (each repeated). The staggering of each left-hand note in the <i>sangsih</i> part offsets the evenness of the left-hand melody. <i>Dynamics:</i> medium. <i>Texture:</i> melody plus interlocking. Two beats = c.132.</p>
<p>B) Drone and violin melody with glissandi and bowed <i>gendér</i> (Example 5, page 3). <i>Dynamics:</i> soft. <i>Texture:</i> violin sounds like an extension of the drone effect; variable element in the players' choice of note and resulting harmonics.</p>	<p>Module 2a (5 beats) and 2b (4 beats).</p>	<p>B) The cycle is expanded to ten four-beat groups, with a simplified left-hand melody and winding right-hand patterns (descending then ascending in the <i>polos</i>, while the <i>sangsih</i> does the opposite). Two beats = c.120.</p>
<p>C) Accelerating click-stops descending through the instruments - "breaking up" time (Example 6, page 4). <i>Dynamics:</i> crescendo. <i>Texture:</i> from sparse to dense.</p>	<p>Module 3a (5 beats) and 3b (4 beats).</p>	<p>C) A coda, which gradually accelerates and crescendos. The melody notes of the right hands are alternated with repeated left-hand notes. Two beats = c.90 speeding to c.176.</p>
<p>D) <i>Batél</i> texture with triplet transitions, leads to a slower <i>batél</i> texture (Example 6, page 4). <i>Dynamics:</i> loud. <i>Texture:</i> oscillation of notes gives urgency. Two beats = c.120, slowing to two beats = c.77.</p>	<p>Module 4a The phrases of 4a feature three-note groups rising in two crescendoing phrases.</p>	
	<p>Module 4b and 4c. These represent a resting point, rhythmically and harmonically. Four violin modules are superimposed over 4b and 4c, plus a short cadence over <i>gendér</i> tremolo. Though the music is at rest, there is still a feeling of anticipation and suspense.</p>	

sense of certainty, rest and completion. However, the acceleration of the coda hints at a return to the "breaking up" of time and instability of part 1, completing the circle. If this is the case, the piece's structure seems to differ from a classical model in that it moves from uncertainty and instability towards stability (in part 3), which, in turn, starts to move back

to instability. Tempo, rhythm, timbre, dynamics and accentuation are thus found to be unifying formal devices in the composition, helping to articulate aspects of its structure.

As a map for exploring the texture, tempo and dynamics of *Birth*, Table 1 further reveals a number of recurring themes or preoccupations of the piece. The introduction itself seems to play on the idea of short sounds and long sounds, using the characteristic sound of the *gendér*, which has a sharp attack followed by a quieter but extended reverberation of a different tone-quality within the tubes—the instrument contains both sonic possibilities.⁸ The tremolos in part 1 section A are not only used to produce a drone effect but also to create overlap between the drones. Such overlapping features prominently throughout the piece. The violin sounds that emerge from this texture (part 1 section B) seem like an extension of these long sounds. The bowed *gendér* again play on this idea of long and short sounds, and overlapping of textures and types of instruments (bowed and struck). They also introduce an element of randomness in the free choice of the musicians as to which notes to bow, and in the unpredictability of the attack, decay and harmonics when bowing the *gendér*. The “raindrops” section (part 1 section C) reiterates these themes by starting with very short (dampened) sounds, sparsely placed, which gather in density to become one long tremolo effect. Again, overlapping is a key feature, with some flexibility on the part of the performers as to how this is achieved. The most prominent effect of the *batél* section (part 1 section D) is one of oscillation, giving a siren-like urgency before settling onto the final chord. This is the first section with a regular pulse, at around 120 bpm, slowing to around 77. Part 1 evinces contrast in dynamics—sections A and B are soft, C crescendos, and the final section D is loud.

⁸ It may be relevant here to recall the importance of the resonating tubes in the Kala stories.

Part 2 is moderate in tempo at around 126 bpm, accelerating slightly to around 132 by the end. As the term “module” was used as part of the compositional thinking of Part 2, and appears in the score, I have retained this term for the analysis of Part 2. The dynamics are even at medium loud, though module 4a features crescendos, and 4c ends softly. Although part 2 is consistently pulsed, the themes of overlapping, flexibility, and “brokenness” or ambiguity of time are still present. Each module overlaps with the succeeding one, and alternate modules have different numbers of beats (5 and 4), creating a polyrhythmic effect that is variable in performance. Thus, despite the clear pulsing, a connection with the features of part 1 is maintained and is emphasized by the tremolo which concludes part 2, echoing the piece’s opening.

Part 3 has a clearer sense of motion, being constructed along more “traditional” lines with its melody-plus-elaboration texture. Section A is around 132 bpm, section B around 120, and section C from around 90 and accelerating to around 176. An *irama*-like change takes place between A and B, in which the melody decelerates by half while the figuration accelerates slightly, again creating ambiguity. Is the music really speeding up or slowing down? In summary, A has medium-tempo melody with medium-tempo figuration, B has slow melody with faster figuration, while C has both fast melody and fast figuration to bring the piece to a close.

An examination of *Birth* via Table 1 reveals themes concerned with sonic contrast and duality: long and short notes, bowed and struck, broken and pulsed time, slow and fast, and overlap (polyrhythm and tremolo) and clear outline. I chose not to introduce *kebyar*-like, sudden dynamic or rhythmic contrasts, having been warned by Ketut Buda Astra and others that excessive use of *kebyar* effects can cause new *gendér* pieces to lose

their idiomatic character (see Gray 2011, 203).

(2) Melody and Figuration

For pitch, melody and melodic figuration, my discussion highlights significant melodic cells and shapes of *Birth* in Examples 10 (part 1), 6 (part 2), and 7 (part 3). These are shown near to actual sounding pitch, with the bottom note of my own *gendér* ensemble at approximately F#, such that the notes of the five-note scale (2, 3, 5, 6 and high 1) are F#, G#, B, C# and E.

Example 10 shows the five pitches that start the piece and are executed in rotation around the instruments in a descending sequence. The sequential approach to melodic cells is reflected in the sections that follow—in the rising and then falling arch of the violin solo, then in the descending click-stop section, ending with the *batél* segments, which are based on the oscillation between the bottom two notes. Does this sequencing reflect the theme of “overlap” we noted earlier? Such melodic development might be seen as an extension of the idea of long overlapping “drones” which emerge from a single pitch and unfold themselves in different directions. This would reflect the themes of transformation and flux, and rotation and overlapping that were notable in the examination of texture above. Once we arrive at the *batél* passage (indicated in Example 10 as segments 1, 2 and 3), the music seems dangerously stuck on the oscillating notes, as if a particular pitch area has emerged from the earlier melodic unfolding and threatens to take over the piece entirely. I do not regard this interpretation as an overly fanciful reading of the melodic “story,” which appears, so far, to be a fairly accurate rendering of the shape of the Kala legend.

Example 10. Melodic Cells in Part 1

Part 1

introduction, page 2

violin solo, page 3 at actual pitch

(continues stepwise downwards)

page 4, click-stop section

this shape continues to descend in sequence

page 4, *batel* section

segment 1

segment 2

segment 3

Example 11 shows the melodic modules that make up part 2 of the piece. To escape from the “dangerously stuck” ending of part 1, a complete melodic break was called for: part 2 is based on different pitch areas and, as I have already noted, seems to use the overlapping melodic modules or cells as stepping stones in a flight or escape from the danger expressed at the end of part 1. Modules 1a, 1b, 2a and 2b can be seen as variations on the idea of groups of three notes ascending or descending. These, along with 3a and 3b, could also be seen as pivoting around the central pitch area. Modules 4a, 4b and 4c draw the pitch focus inward towards the final pitch, B (note 5), while the violin solo over this activity (score p. 8 in Example 12) mirrors the earlier modular shapes of the *gendér*. The shapes of the individual modules can also be seen as pitch permutations, revolving for a while before interacting with the next module in flexible polyphony. Thus,

Example 11. Melodic Cells in Part 2

Part 2

The image shows a musical score for Example 11, Part 2, in G major (one sharp). It consists of six staves of music. The first three staves are labeled with melodic cells: 1a and 1b (top staff), 2a and 2b (second staff), and 3a and 3b (third staff). The fourth staff is labeled 4a and contains a complex rhythmic pattern with many sixteenth notes. The fifth and sixth staves are labeled 4b and 4c, respectively, and contain simpler melodic lines. Vertical lines connect the labels to the corresponding musical phrases.

for violin modules that overlap 4b and 4c, see score page 8

Example 12. *The Birth of Kala* Score, p. 8

Violin section 2 (violin tuned as before but these sharpened intervals seem to work better in this register):

The image shows the violin section 2 score for Example 12, starting at measure 11. The music is in G major and 2/4 time. It features several measures with triplets and slurs. Measure 11 has a triplet of eighth notes. Measure 12 has a triplet of eighth notes. Measure 13 has a triplet of eighth notes. Measure 14 has a triplet of eighth notes. Measure 15 has a triplet of eighth notes. Measure 16 has a triplet of eighth notes. Measure 17 has a triplet of eighth notes. Measure 18 has a triplet of eighth notes. Measure 19 has a triplet of eighth notes. Measure 20 has a triplet of eighth notes. Measure 21 has a triplet of eighth notes. Measure 22 has a triplet of eighth notes. Measure 23 has a triplet of eighth notes. Measure 24 has a triplet of eighth notes. Measure 25 has a triplet of eighth notes. Measure 26 has a triplet of eighth notes. Measure 27 has a triplet of eighth notes. The score includes fingerings and articulation marks. A note in measure 15 is marked "1st time easier to play 1st note low:" with a diagram showing the fingerings. The score ends at measure 27 with the note "coincides with gender tremolo".

the melodic structures combine our themes of revolution and overlap in a forward motion, albeit at a relatively slow pace.

Aside from the relations outlined above, Example 11 illustrates that module 1a is related to 2a and 3a, while 1b, 2b and 3b are similarly linked. This linkage is achieved mainly through the rhythmic emphasis of certain notes, and constitutes more than just sharing the same number of quarter note beats. Modules 1a and 1b share the stresses created by certain notes being held for a quarter note rather than an eighth note: C#, C#, B in module 1a; E, F#, F# in module 2a; G#, G# in module 1b; E, E in module 2b. These quarter-note stresses occur at equivalent places in the modules and have been indicated by vertical lines between them. In modules 3a and 3b, the quarter note emphasis shifts elsewhere—as variations, the modules become increasingly divergent from the sources modules 1a and 1b (multiple lines are shown emerging into module 3a, for instance). These quarter note stresses seem in some ways to foreshadow the melodic syncopations of part 3 (see below) and, in modules 1a and 2a, to articulate a sense of downward and upward melodic motion, respectively.

In Example 11, I would also like to draw attention to the role of groups of three eighth notes, particularly those which occur after a quarter note and which end a module. These are boxed to draw attention to their similarity, which could perhaps be termed cadential in nature, but only in the sense that they articulate motion towards the end of a module or the start of its repetition. I will admit that there is a certain ambiguity between end accentuation and beginning accentuation in these modules, which is thrown into relief by the “cadential” nature of the three-note groups.⁹ Some of the boxed three-note groups

⁹ The ambiguity of accentuation could reflect the mixture of my musical background in mostly beginning-accentuated Western music and long exposure to mostly end-accentuated gamelan traditions. While

also occur within modules; these may have the role of secondary motion towards resting points.

Example 13 begins with the opening phrase of part 3 of the piece, with downward and upward stems indicating the *polos* and *sangsih* players' parts, respectively. Right-hand parts are shown on the upper staff and left-hand parts on the lower. This starting phrase is subsequently varied, but all phrases are based on the descending three-note cell in the left hands, with the *sangsih* part delayed by one beat. The three-note cell is expanded in section B, with interlocking figuration between the right hands of the *polos* and *sangsih* players that are based on three-note cells that rise and fall in opposite directions between *polos* and *sangsih*. Finally, the coda is shown, with the melodic cells of the main *polos* theme indicated by brackets underneath. Part 3 appears to be somewhat different in style from the rest of the piece. It is the part of the piece that is most conventional in terms of *gendér* style. While it is easy enough to trace influences from the piece *Sudamala* and other examples of ritual gamelan music, however, what is not immediately obvious is the link with the themes and preoccupations I have highlighted in the rest of the piece. These latter aspects—transformation, flux, overlapping, drone, contrasts between long and short notes, and modular composition—are simplified in part 3 into repeating melodic ostinati, which vary and are then stretched and compressed into the coda. The simplification and return to a “reassuringly” conventional style reflect the restoration of balance within the story and a clear extra-musical reference to ritual in general, in which repetition is invariably important. Nevertheless, it is perhaps here that the piece links my ideas about transformation with the kinds of “perpetual variation”

composing this music, I did not consciously try to create either type of accentuation, being guided mostly by intuition.

Example 13. Melodic Cells in Part 3

Part 3

Section A

right hands, *polos* below *sangsih* above:

left hands, *polos* below *sangsih* above:

Section B

right hand *sangsih*:

right hand *polos*:

Section C

right hands, *polos* below *sangsih* above:

left hands, *polos* below *sangsih* above:

forms that are a defining feature of “traditional” *gendér* music (Gray 2006, 2011).¹⁰

Example 13 shows how variation takes place through the expansion and then contraction of the melody. The relationship between the left-hand melodies of sections A and B is clear, as it involves a simple doubling of speed. The relationship between the left-hand melody and the *polos* melody of section C is less clear—boxed notes show the melodic

¹⁰ I discuss the problems inherent in using such words as “traditional” about *gendér* pieces below.

running through the piece as a whole, tying part 3 of the piece into the overall structure despite its more conventional texture.

In summary, it is clear that one of the underlying principles of the composition at a melodic level is the sequential manipulation and variation of melodic cells. It was of great interest to me to discover the pervasive sequential aspect of the piece through this analysis, as I was unaware of it at a conscious level during the act of composition. Other key melodic features of the piece that have emerged from this examination are: transformation, flux, overlapping, drone, contrasts between long and short notes and modular structure. The principle of transformation or variation was found to be central to the piece as a whole, helping to tie in parts that at first seemed quite disparate.

(3) Polyphonic Aspects

Example 15 highlights the significant vertical aspects of the pitch structure together with a sense of its melodic movement over the span of the piece. Drones or continuous tonal areas are represented by unfilled notes, while shorter durations or pitch-areas of secondary importance are indicated by filled notes.

The reduction of part 1 of the piece shows that it is not only based upon the lowest note, F# (note 2), which occurs as a drone at times, but also on a more flexible middle pitch area and an upper pitch area. This differentiation of pitch register is articulated by the arch of the violin solo and by the descending click-stop passage, but the tripartite nature is made even more apparent later, in the emphasis not only on the lowest note but also on a middle area around G# (note 3) and high E (note 1). Examining the reduction of part 2 of the piece, the importance of tripartite pitch areas becomes even more well

Example 15. Harmonic Outline of *The Birth of Kala*

Part 1

page 2 introduction

page 3 violin solo

violin

gender drone

page 4, click-stop section

page 4, *batel* section

Part 2, pages 6-8

module 1a 1b 2a 2b 3a 3b

4a 4b 4c

page 8, violin

continues as *gender* drone

Part 3

A B C

defined. Indeed, all of the modules exhibit this tendency to a central pivot with two outlying pitches, high and low, usually B (note 5).

Part 3 of the piece shows a firmer commitment to the strong dyad found in traditional *gendér* music, C# and G# (notes 6 and 3). This interval, known as *empat*, is a secondary consonance after the octave, which may help to further the sense of tonal stability in the final section. However, there is a secondary tonal area—F# (note 2) and B (note 5)—that alternates with the primary one.

The prominence of this separation into three pitch areas (high, middle and low) throughout the piece, with the outer two acting as “outliers” of the middle pitch, was somewhat surprising to me. I had been aware of the presence of this shape in some of the

modules of part 2 but had no idea that it occurred so systematically throughout the piece. I would suggest that this feature is related to other aspects of ambiguity within the piece, which I have already discussed in relation to rhythm and melody. For instance, the trichords F#, G# and E at the start of the *batél* section, or the G#, E and B of part 2, module 1b, are ambiguous because either of the two dyads they articulate (in the “traditional” *gendér* sense), either F# to G#, or G# to E in the first, could be seen as dominant—there is no way of determining if either one will prevail, or perhaps neither. It is true that such piled up intervals, particularly of notes four keys apart (*empat*) are a feature of *gendér wayang* style, and it is quite likely that I have developed this way of thinking into the work as a whole.

In addition to indicating the tonal anchors, Example 15 also shows some aspects of the quasi-harmonic progression of the piece. I have already pointed out that part 1 is broadly based on the lowest pitch (F#, note 2), while part 2 is based on note 5 (B), and part 3 is based on note 6 (C#). However, Example 15 demonstrates that other, secondary notes are also given prominence, particularly in part 2, in which the shifting between note groups and voicings contributes to its sense of restlessness, despite the evenness of rhythm and repetition of modules.

(4) Movement, Visual Imagery, Color, and Directional Symbolism

It is important not to separate the non-musical parameters from the musical ones in this piece. Aspects of movement had emerged in a collaborative fashion over the course of the rehearsals: I selected an image of water over fire to reflect the imagery of Balinese yogic theory (see Stephen 2005, 2010), and we decided to expand on some of the color

Table 2. Symbolic Associations of Cloth Colors in *The Birth of Kala*

<i>Color</i>	<i>Direction</i>	<i>Deity</i>
Blue	North/Mountainwards	Wisnu
White	East	Iswara
Red	South/Seawards	Brahma
Yellow	West	Mahadewa
Multi-colored	Center	Siwa/Buddha

and material symbolism from this image. The use of cardinal directions reflected their central importance in Balinese ritual thought and also the recurring theme of the crossroads in the Kala stories. Objects reflect those referred to in the stories. The colors of the cloths laid out on the ground reflect Balinese directional symbolism and links to particular deities, which are summarized in Table 2.¹¹

In performance, this color symbolism is given dynamic movement as Tim unrolls the cloths, emphasizes their outline with lines of salt, and arranges objects and works with water and flowers in the center. From 17:28 in the video part 2, Tim starts to place water and flowers in separate small bowls, which he then begins to distribute around the auditorium (19:30 ff.). The sense of gradual unfolding of the story—the progress within the music, and different layers of meaning—is mirrored in these actions; the crossroads is wherever we find ourselves, and contains the possibilities of choice and change.

The analysis of aspects of the piece has uncovered tendencies, particularly with regard to pitch (motivic sequences and tripartite pitch areas), which I was unaware of while composing, as well as key aspects of the piece such as:

- (1) a play on contrasts (long and short sounds, bowed and struck, broken and pulsed time, overlap and clear outline)
- (2) recurring musical features such as sequences, drones, tripartite harmony, and modular structure

¹¹ See McPhee 1966, 38n5.

- (3) most importantly, a sense of continuous variation, transformation and flux, which undermines any attempt to view the concept, story—or its cultural background—as unchanging or static.

RELATION BETWEEN ANALYSIS AND COMPOSITIONAL CHOICES AND INFLUENCES

In this section, I will examine the previous analytical findings, first within the context of my own compositional choices, and second in comparison with other new composition for gamelan.

Motion and Transformation

I have used the phrase “breaking up time” as a way of describing some of the unmeasured sections of *Birth*, and in particular the accelerating click-stops which are a feature of *gendér wayang* music (particularly in the introduction). Paul Humphreys (1991) has posited a connection between the accelerating click-stops on one note or chord, common in Balinese music (for instance, in the introductions to *gong kebyar* and *gendér wayang* pieces, and sometimes on the final note for emphasis) and other musical cultures that have been inspired to some extent by Buddhist thought, including those of China, Korea, Japan, and Tibet.¹² Humphreys describes the accelerating roll as “a systematic disruption of the background of temporality” (290). The limitation of space here prevents exploration of this topic, which is deserving of further research.

I would like to draw attention to another aspect of the sense of motion, transformation and flux that has emerged from the analysis. I have mentioned that the

¹² I am indebted to Professor Henry Johnson of Otago University for drawing my attention to this article. Balinese culture, although predominantly Hindu, has been influenced by Mahayana and Tantric Buddhism.

opening passage, in which notes rotate around the instruments, was based on a correlation between note names and the directional symbolism of the *nawasanga*. The names of these pitches in Balinese are: *dang* (C#, note 6), *ding* (E, note high 1), *deng* (G#, note 3), *dung* (B, note 5) and *dong* (F#, note 2).¹³ Rather than conceptualizing the pitch system as a static, map-like model (implied, perhaps, by Bandem's study, which is a product of the New Order era), it is the *movement* of the notes as they circle the instruments in *Birth* that is important and leads to the dynamic emergence of the piece as a whole.¹⁴ The modulation of pitch structure draws inspiration partly from the work of Ida Wayan Oka Granoka (Gray 2011, 213–17; Granoka 2001a, 2001b) and especially from Michele Stephen's emphasis, based on the interpretations of her informants, of the *nawasanga* as the model of a dynamic cosmos rather than a static, hierarchical structure: “[It] represents a spinning helix or cone. It implies changes, choices and possibilities” (1995, 127).

In accordance with the cosmology of flux, *Birth* explores metric ambiguity, shifting dimensions and overlapping textures. Its drones are never solely static and perhaps thus avoid the Orientalist trap of equating gamelan with “steady states” or “lack of climax” (see Gray 2011, 16–17). In my handling of drone effects, I was to some extent influenced by La Monte Young (whose multimedia projects also inspired mine), Ben Chasny's *Six Organs of Admittance*, and my limited experience as student of the Carnatic violin.

Transformation is evident in the modular structure of part 2. Here, the aim was to convey the feeling of pursuit, flight and refuge, so as to suggest Kala's pursuit of Raré

¹³ See McPhee 1966, 38n5; Bandem 1986, 42–3.

¹⁴ McGraw (2005, 72) and Wakeling (2010, 171–2) have questioned the origin, dating and agenda of the *Prakempa* text presented by Bandem and subsequently drawn on by theorists and composers both inside and outside Bali.

Kumara in the story. The section is conceived as a fugue, not in the conventional musical sense but in the sense of “flight.” Looking for a way to link the modules, I was influenced by the loose but guided modular structure of Terry Riley’s famous *In C*.

Other Influences

Birth also draws on more conventional Balinese sources, such as *batél*. The corresponding passage from *Birth* differs from the usual *batél*, however, in harmonic structure—in the alternating higher pattern, and in the triplet link passages (partly inspired by dubstep patterns). Influences from Javanese gamelan occur in the *irama*-like change of part 3 and the *gangsaran*-like coda. There is a correlation with the main gong tones of the three *sléndro pathet* as used in Central Javanese *wayang* (section 1 is based on note 2, section 2 is based on note 5, and section 3 is based on note 6). This correlation, however, was not consciously planned. A Gregorian Dorian *Kyrie* melody was originally to be incorporated into part 3 section A and, to some extent, influenced the final version. The whole piece owes aspects of mood and ethos to the piece *Sudamala*, discussed above, but also to much other ritual music from Bali, such as the ancient *selonding* and *luang* (see McPhee 1966, 256–93).

Specific extra-musical influences include the neo-rituals of Ida Wayan Oka Granoka in Bali (see Gray 2011, 213–17) and Javanese movement artist Suprpto Suryodarmo, with whom Tim had worked (see Lavelle 2006). I had originally wished to incorporate some words by William Blake (*The Song of Enitharmon over Los*, verses 5 and 6), whose unique personal mythology seemed to resonate with aspects of the interplay of cosmic forces inherent in the Balinese legends.

Part 3 section B was consciously inspired by the *kolam* patterns (ritual drawings in rice flour) of South India (see Mall 2007). The interlocking patterns in the two *gendér* parts move in contrary yet interwoven motion—the *polos* starts high and works its way downwards, while the *sangsih* starts low and works its way upwards, and the two parts cross in the middle before reversing their motion. In applying this technique, I was trying to reflect the idea of a universe in constant motion, a theme expressed in many of the transformations in the stories (see Stephen 2005, 2010).

I should emphasize that the influences above are examples of specific conscious choices and influences on particular aspects of this piece. More generally, my compositional style is influenced by the English experimental tradition (my first gamelan compositions were for the new music gamelan Metalworks, run at that time by composers Mark Lockett and Janet Sherbourne), rock, pop, and contemporary folk music. Having shown how some of the findings of the analysis relate to specific influences on the pieces, I will attempt to locate the piece within the broader conversation about contemporary gamelan composition.

RELATIONSHIP WITH CONTEMPORARY GAMELAN COMPOSITION

Besides traditional *gendér wayang*, *The Birth of Kala* project is rooted in comparisons of compositional procedure between Balinese composers of *gendér wayang* and *musik kontéporér* (contemporary music), and the use of gamelan in fusions both in Indonesia and other countries, particularly the USA and UK. A full discussion of this topic is outside the scope of this article, but among the numerous articles about Western composition for gamelan are those by Judith Becker (1983) and Neil Sorrell (1992 and

2007). More general influences are discussed in Nichols (1996), and Perlman (1994), the latter of whom looks at the differing ideologies of tuning held by Javanese musicians and western composers who claimed to be influenced by gamelan. The work of the composer Lou Harrison in particular, who in many ways paved the way for Western gamelan composers, is discussed by Miller and Lieberman (1999), and Alves (2001). Self-reflexive articles by western composers for gamelan include Miller (2005) and Tenzer (2011). A complete survey of the numerous non-Indonesian composers who have composed for gamelan is also outside the scope of this study, but, besides Harrison, special mention should be made of Philip Corner and Barbara Benary, who compose for Gamelan Son of Lion contemporary gamelan in New York (<http://www.gamelansonoflion.org>). In the UK, a similar homemade gamelan for new music, called Metalworks, was created by Mark Lockett (<http://www.metalworks.org>). I played and also composed for this gamelan in the 1990s.

Birth was influenced by the *musik kontemporer* of Java and Bali, based at music academies ISI (Institut Seni Indonesia) in Solo, Central Java, and Denpasar in Bali. Examples of pieces by composers such as I Wayan Sadra and Pandé Madé Sukerta can be found on a series of CDs: *New Music Indonesia*, vols. 1, 2 and 3 (1989). Such pieces demonstrate an experimental approach to sound and material and constitute a distinctive compositional tradition not necessarily based directly on imported Western modernist or post-modernist music (see Roth 1986 for Javanese practices; and Harnish 2000, McGraw 2005, 2009, 2010, and Wakeling 2010 for Bali). These pieces are not generally regarded as representing cases of fusion with Western ideas or music, so much as a new approach

to gamelan and traditional music.¹⁵ Meanwhile, outside the academy, composers such as Ida Wayan Oka Granoka in Bali, or Halilintar Lathief in Sulawesi, and movement artist Suprpto Suryodarma in Java have explored neo-ritual as a means of resisting both the hegemony of government academies and commodification of the arts (see Gray 2011, Sutton 2002, and Lavelle 2006). Another Balinese artist who has explored neo-ritual through performance art is I Nyoman Erawan.¹⁶ Other types of new exploration in the field of gamelan fusion have been in the field of rock music (notably *Guruh Gypsy* by Guruh Soekarnoputra in 1977) and jazz-fusion (for instance West Javanese band Krakatau). Miller (2008, 1) discusses how a new generation of contemporary Indonesian composers is attempting to find “alternative populisms,” adopting styles and audiences of pop, rock and jazz (originally eschewed by older contemporary Indonesian composers), while maintaining a concern about commercialization and the cultural dominance of the west. Among such composers in Bali is I Wayan Balawan, equally at home on guitar or gamelan, who fuses jazz and rock with Balinese music (see <http://balawan.net>; Harnish 2013). The art and music collective, Bona Alit, also give a world music perspective on Balinese music, further blurring distinctions (see <http://bona-alit.com>). Balinese rock bands—for instance, the death metal band Eternal Madness—have incorporated gamelan patterns into their music (Wallach 2008, 114–19). Other recent fusions have a more commercial feel, such as Gus Teja World Music. Shadow puppetry as well has taken more experimental forms, both inside and outside the academies of Java and Bali. Here, I only have space to mention the work of I Madé Sidia from Bona, who has also worked

¹⁵ For a discussion of the relationship between Balinese contemporary music and Western modernism, see McGraw 2010; regarding Western influence on Indonesian *kontemporér*, see Miller 2008; for more on hybridity in Balinese music, see Steele 2013.

¹⁶ For a description of a collaboration between Erawan and Sukawati composer I Ketut Budastra, see Gray 2011, 218. See also Ramseyer 1995.

collaboratively with composers outside Indonesia, for instance on the *Theft of Sita* project which toured Europe and elsewhere, and *Wayang Kali* with American composer Andrew McGraw (see https://facultystaff.richmond.edu/~amcgraw/wayang_kali.html).

Rather than tackle all of these varied styles, I will briefly highlight aspects of the work of just a few non-Indonesian gamelan composers to help locate *The Birth of Kala*. Dwight W. Thomas (1983, 93), in his discussion of Lou Harrison's *Double concerto for gamelan, violin and cello*, describes Harrison's compositional approach as a "commitment to liminality" both in identifying with the experimental tradition and with Javanese gamelan. Thomas's assessment was reflected in his reaction as a member of the audience: was he listening to a Western art-music concert, an experimental event, or a Javanese performance?¹⁷ These diverse reactions, understandably, led to a certain anxiety about what Harrison was trying to do (Thomas 1983, 100). In a similar way, I feel, the performance of *The Birth of Kala* was unsettling for the audience in its liminality. The programming included many different elements: storytelling, Balinese pieces, new music and action. Having encountered a continuous story in the first half, the audience was unsure whether to applaud after individual pieces in the second. I have already highlighted musical ambiguity as a characteristic of the piece in the analysis, and this ambiguity was a deliberate part of the programming as a whole.¹⁸

Henry Spiller criticizes Harrison for relying on Western compositional techniques, seemingly disguised as Javanese music, and thus creating a reassuring image of

¹⁷ Thomas describes how the gamelan player in him, the music historian in him, the American musician in him and the ethnomusicologist in him, all had slightly different reactions to Harrison's music.

¹⁸ A further example of this was the way Tim first came on stage, posing as a lost tourist. The audience was unsure of his status within the performance, until he merged with the projected backdrop and transformed into the storyteller.

”Javaneseness” in the mold of the dominant culture (Spiller 2009). Although I am happy to accept any criticism of *The Birth of Kala*, I do not believe that, in this piece, the Western elements are hidden behind any influences from Bali, Java or elsewhere. Whether or not I have ”understood” or ”misunderstood” anything about the Balinese music I was taught is another question, which I have no way of answering at present. The piece is rather a hall of mirrors in this respect: some of the Balinese influences on it were derived from experiencing Balinese new *kontemporér* composition, itself related by ambiguous paths to new music from the West.

It may also be useful to consider *The Birth of Kala* in the light of the work of another American composer and theorist, Michael Tenzer. In his article on his piece, *Unstable Center/Puser Belah*, Tenzer describes the composition in terms of a meeting of complex musical theories—Western modernist, Balinese and Carnatic—in a rich fusion work for Balinese *gong kebyar* (Tenzer 2011). Although Tenzer’s complex style of music is different from my own, his background in learning and performing gamelan and studying ethnomusicology gave a particular impetus to his creative drive, which, after many years sought expression in particular musical forms (Tenzer 2011, 81). In this, I recognise a creative impulse similar to the one that gave rise to *The Birth of Kala*.

This discussion has already raised certain issues of representation, one of which I will examine with reference to an article about the composer who most famously associated with Bali, Colin McPhee. Douglas Young’s (1986, 19) description of McPhee’s 1936 orchestral work *Tabuh-tabuhan* celebrates the fact that this work, for the first time, treats Balinese music, jazz, Latin American folk and Western classical music as equal partners, refusing to represent Balinese music in terms of “primitivism,” “barbarism” or

pseudo-mysticism. Young (1986, 18) is particularly hard on Messaien's *Turangalila* in this regard. I am sensitive to the fact that *The Birth of Kala* does indeed relate to aspects of Balinese mysticism, and I acknowledge the potential danger of reinforcing old clichés about the “mystic east.” I would, however, defend this aspect of the work on the grounds that it is anchored in ideas and stories gleaned from my teachers in Bali as well as informed by reputable scholarship (particularly Hooykaas 1975 and Stephen 2005). One of the piece's aims was to explore in an abstract way some of the themes that had emerged from the story. Thus, the multiple viewpoints given by storytelling, sound and visual image were intended to clarify rather than mystify.

A second issue of representation has to do with programming. I understood that it might be satisfying to the audience to include a mixture of old and new, Balinese and Western, storytelling and music. The intention was not to contrast traditional Balinese music with modern Western music, but rather to include some of the extraordinary and beautiful pieces that had been taught to me by Locéng in Sukawati, beside which my own pieces pale into insignificance. Although there is a stylistic contrast between the Sukawati pieces and *The Birth of Kala*, the following piece of mine, *Saraswati*, is more conventional in style, built in the manner of a *pangkat* piece with left-hand ostinato and right-hand interlocking. To describe the Sukawati pieces as traditional, though a convention of programming, would rather disguise their continual re-creation by different generations of composers; even the archaic-sounding *Sudamala* owes its two variation sections to re-workings by Locéng.¹⁹ In some ways, *The Birth of Kala* attempts to avoid these distinctions of old and new by adopting some of the aesthetic of *Sudamala*. In this matter, I was influenced by Granoka's work, which, while looking “backwards” toward

¹⁹ See Gray 2011, which is devoted to the subject of this type of composition and re-composition.

ritual forms, actually produces results of surprising “modernity.” These dualisms become so self-reflecting after a while that their analytical usefulness begins to fade, as do the increasingly musically meaningless terms “East” and “West,” though not the issues of power and economic imbalance that underlie them. The important thing is that these issues of power difference, based on an inequitable world economic system, should not be disguised or glossed over either by academics or by creative artists.²⁰

As a composer, I cannot give completely clear answers to these questions of representation; I can only ask further questions.²¹ I am currently working on a project based on an English-Welsh-borders story, called *The watchers by the well*. The psycho-geography of the tale hints at its liminality. It will probably feature a mixture of “old” and “new” music, including *gendér wayang*. Our particular exploration of this story also entails an oscillation between urban and rural, old and new, fantastic and everyday, human and fairy, here and there. In some ways, I feel more able to explore these areas as a composer than as an ethnomusicologist. In *The Birth of Kala*, I consciously limited myself to acoustic instruments in order to see what could be achieved sonically this way. However, subsequent projects I have been working on involve combining *gendér* with rock and pop music (see www.mytricksyspirit.com), in a manner that perhaps mirrors some of the work of the younger generation of Balinese composers mentioned earlier.

CONCLUSION

Despite the fact that experimental gamelan is part of the tradition in Indonesia itself, I have found myself grappling with the conceptual ethics of my own “fusion”

²⁰ Similar problems to the ones I have encountered as a composer also obtain in ethnographic writing.

²¹ For an exploration of these topics, see Born and Hesmondhalgh 2000.

experiments because of the fine line between homage and appropriation.²² However, in general, I believe that it can be ethical to compose in this medium, provided one strives to be culturally sensitive and remain aware of the complex issues of voice, representation and agency, just some of which I have touched on here. I feel that composition is a logical outgrowth of a developed bi-musicality. Thus, in another context, J. H. Kwabena Nketia explains how a composer may be able to go beyond a superficial engagement with another tradition and use it as a means of thinking in another system: “[W]orking with materials in one or more African and Western music traditions means that one is coping simultaneously with different systems of musical thought that one learns to integrate” (1995, 227).

In his foreword to Michael Tenzer’s *Gamelan Gong Kebyar: The Art of Twentieth-Century Balinese Music* (2000), Steve Reich asserts that such books “give a Western composer information about how a particular non-Western music is organized structurally, which may prove to be more fruitful information than just knowing superficially how the music sounds” (xv). This assertion is true, but rather than just trying to lift specific techniques out of the music that interests us, whether timbral or structural, I feel it is as interesting to have absorbed the feeling of a music through playing and exploring the aesthetic values that underpin it. I hope to enhance my ability to do this through future collaborative projects with composers in Bali. Such projects could turn some Balinese concepts onto ourselves, for instance: How do Balinese see creativity in general, and how do they gauge the creative endeavours of Westerners and other non-

²² I have tried to find an alternative word to “fusion” in regard to my own music, as this metallurgical metaphor (paradoxically) seems to draw attention to elements as separate entities, rather than the resulting synthesis. “Hybrid,” based on a gardening metaphor is perhaps better in this regard (see Hughes-Freeland forthcoming).

Balinese? This would follow Unni Wikan's (1990, 282) view that what is important is not just Balinese ideas about "Balinese things," but Balinese ideas about shared human experiences that transcend cultural differences.

The main creative impetus to this project was my study of *gendér wayang* with Locéng and my interest in the ideas presented to me by Locéng and Granoka. This became a compositional process rather than a specific project, a process that I hope will continue as I study further in Bali and elsewhere. Ingold, emphasizing process over product in creative endeavor, states that the artist's invention "does not end with the completion of his work, any more than it began with a preconceived idea of its final form. It is not, in other words, encompassed within the bounds of any specific project" (2007, 48). In other words, I hope to become not just a Western composer influenced by specific *techniques* of other musics, but also by musical and extra-musical ideas and concepts.

In my book, I tried to create a dialogue between the words of my Balinese friends and teachers, notated musical examples, and my own ideas, while acknowledging that the authorial voice can never be unbiased (Gray 2011, 246). Likewise, a project such as *The Birth of Kala*, as with all musicking, involves a network of relationships in a collaborative enterprise.²³ This article somewhat distorts the reality of the concert by its emphasis on my own piece, which was only one part of a whole network of utterances, and which pales in comparison with the finely wrought Sukawati pieces. It has been ten years since I last had the opportunity to visit Bali, and one of my first aims on my return will be to submit my composition work, including *The Birth of Kala* to the feedback and scrutiny of friends and teachers there. I hope to weave compositions such as this into a longer-term project exploring issues of voice, place and story, and to explore collaborations with Balinese

²³ See Small 1998.

composers. I conclude by hoping that this article makes a small contribution to the debate around some of the questions raised by David Hughes (2004) about the relationship between bi-musicality and artistic creativity as well as providing a snapshot of a particular musical moment in time.

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The concert can be found in two links on the SOAS music department's YouTube site:
http://www.youtube.com/watch?v=0EH87ay_f8c and
<http://www.youtube.com/watch?v=l-a8BQen5LI>.

I Wayan Balawan: <http://balawan.net>

Bona Alit: <http://bona-alit.com>

Gamelan Son of Lion: <http://www.gamelansonoflion.org>

Metalworks: <http://www.metalworks.org>

My Tricksy Spirit: www.mytricksyspirit.com

Wayang Kali: https://facultystaff.richmond.edu/~amcgraw/wayang_kali.html

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