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Preface to the first FGS Journal

It is my great pleasure to write a few words about the Journal of Visual and Performing Arts Research as the first research journal ever published by the Faculty of Graduate Studies, UVPA Colombo. It has been two years since the FGS at UVPA has been established as a full-fledged faculty dedicated for quality research and practices.

Over the years, Faculty of Graduate Studies at UVPA has produced numerous researchers in performance related disciplines and their research outcomes have enriched the current discourse of Visual and Performing arts research in the Country. Professor Sarath Chandrajeewa, the first Dean of the FGS initiated the Journal of Visual and Performing Art Research with his visionary guidance and creative labor. He invited postgraduates and academics to submit their research papers and PhD extracts from their MPhil and PhD theses to compile a collection of high standard publications in 2017. Therefore, the Journal of Visual and Performing Arts Research comes with such diverse collection of papers and monographs written by performance practitioners, artistes and academics currently engaged in performance practice and research.

I wish to thank Professor Sarath Chandrajeewa who meticulously overlooked the overall structure of the journal. Dr Achala Abeykoon took the burden of working on the language of the journal. Miss Kanishka Wijayapura has been really patient with the long running lay outing and designing process. Furthermore, I must thank the referees of the journal, Professor Kusuma Karunarathne, Professor Theodore Warnakulasuriya, Prof. Daya Edirisinghe and Prof. Sarath Chandrajeewa for their hard work to make this journal a success. Their expertise has immensely contributed to uplift the academic standards of this Journal. I must pay my gratitude to the Board of Study at FGS who have also supported at various stages of the journal publication process. My staff at the FGS including Mrs Vindya Pererra, Assistant Registrar FGS, Ganga, Imalsha and Harshana have also been very much supportive since I became the Dean of the Faculty. Their constant support and encouragement in making this journal a reality must be appreciated at this important moment. FGS research Assistant, Samal Vimukthi Hemachandra took the responsibility of coordinating with writers and compiling the final draft of the journal.

Finally I must be thankful to the UVPA International Collaboration and Research Division, and the Council members who have supported in bringing this journal to the public.

Last but not least, all the contributors who provided their research papers and segments of their dissertations should be mentioned here as without their generous contribution this journal would not have been a reality. As the Dean of the FGS, I salute them and congratulate in their future research careers.

Dr Saumya Liyanage
Dean
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List of Articles

Scuffle over mobile phone usage between mothers and their techno savvy children in Trincomalee, Sri Lanka

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Abstract

The usage of mobile phones has become a contested area to understand contemporary power relations between parents and children. While the mainstream studies are focused on issues related to the ownership and use of mobile phones by children or on the reinforcement of mother's childcare role, owning and using a mobile phone by a child is not yet totally approved or socially condoned in certain countries and societies due to cultural norms and various other prejudices. Yet, it is a universal phenomenon that being young means being techno-savvy. Hence, this study is focused on the challenges faced by mothers in the usage of mobile phones by their techno-savvy children, particularly because of their gendered roles as mothers and heads of households in a conservative patriarchal society in Sri Lanka. The findings indicate that only a few mothers had bought mobile phones for their children and mothers regarded mobile phones as a scapegoat for not doing studies well by the children because of their addiction to mobile games or probability of initiating forbidden romantic relationships.

Keywords: children, mothers, mobile phones, gender roles, Sri Lanka

Introduction

Mobile phone, the fastest diffused communication technology in human history (Castells 2008) has restructured or rearranged how we coordinate and organise our lives, families and social lives. The use of mobile phone by children has become a debatable topic all over the world because both children and their parents have faced paradox situations in mobile communication. The very definition of the child or children is also different from one society to another. For instance, even though the independence and privacy of children are respected treating them as adults from the ages of 15 or 16 in the Europe, USA or Australia, in many Asian and African countries, children would not be perceived as independent individuals until they finish their university education, be employed or until they are married. Hence, this study is focused on the challenges faced by mothers in the usage of mobile phones by their techno-savvy children, particularly because of the acceptance that the children should not

use mobile phones and their gendered roles as mothers and heads of households in a conservative patriarchal society in Sri Lanka.

Mobile communication in Sri Lanka

The mobile phone is ubiquotus in Sri Lanka. By March, 2018, the country had 28,970,381 mobile phone subscribers (TRCSL 2018: 4) with a market penetration rate of 116.7% by December 2015 and each mobile subscriber owning an average of 2.7 SIMs (Subscriber Identity Modules) (GSMA Intelligence 2013: 4). By 2012, 90.62% of mobile subscribers used pre-paid services while post-paid subscribers were 9.38% (GSMA 2013a). Today, one local and four international mobile network operator sare in a fierce competition in the mobile industry to increase their customer base. Sri Lanka also records one of the lowest charges for mobile celluar prices (ITU 2012; GSMA 2013).

Mobile phones, parents and children

Richard Ling (2012: 124) captures the essence of the debate on mobile communication between parents and their children in mainstream literature, particularly in the West, as 'the mobile phone has restructured the way that parents keep tab on their children and has given teens a new freedom and independence'. A considerable number of studies conducted in the Europe (Fortunati & Manganelli 2002; Höflich & Rössler 2002; Ling 2001; Vershinskaya 2002), South Korea (Yoon 2003), USA and Japan (Lai 2006) found that the parents had gifted mobile phones to their children, hence parents encouraging mobile phone ownership among the children. As Castells, Fernandez-Ardevol, Qiu and Sey (2009: 150) point out when the mobile phone becomes a commodity in a certain country because of its high diffusion, children start owning mobile phones from their younger age, from about eight years as observed in the USA and the Europe. The children's ownership of mobile phones has also been increased in these countries after 9/11 attack and school shootings (Selingo 2004 & Castells et al. 2004:78-82 cited in Castells, Fernandez-Ardevol, Qiu & Sey 2009).

Oksman and Rautiainen (2002) found that in Finland small children under ten years were permitted to make calls under parental supervision while they read Short Message Service (SMS). However, when they were teenagers and pre-teens (10-12 years old), parents respected their privacy and autonomy in children's mobile communication treating them as young adults (Oksman & Rautiainen 2002; Fortunati & Manganelli 2002). The Japanese children owned mobile phone even when they were younger than 10 years old that they even used to send SM to their parents when at school (Lai 2006). However, these findings would not be observed in certain countries due to cultural practices and hierarchical social structure.

The children's ownership of mobile phones has facilitated the communication between the parents and their children especially when children stay at home alone after school until their parents return home after work. Hence, the parents could be

reassured on the safety of their children (Ling 2012; Oksman & Rautiainen 2002; Haddon 2002; Noticiaswire n.d). In Japan, since the children's safety has become prominent, the Global Positioning System (GPS) introduced by the government had facilitated the parents to easily track down their children because of the location-based navigation tools available in the children's mobile phones (Lai 2006). The mobile phone also enhances the family communication in handling issues such as transportation, food and sicknesses of the children (Ling 2012; Oksman & Rautiainen 2002; Haddon 2002; Noticiaswire n.d; Weerakkody 2009). Parents also felt that it was their responsibility to provide their children the technology to make sure that they would not experience any technological divide (Fortunati & Manganelli 2002; Oksman & Rautiainen 2002). Being an everyday commodity, in addition to safety, mobile phones have also become a device to provide affection and sociability. Consequently, Haddon (2002: 118) mentions that a 'bedroom culture' has emerged in countries like UK because mobile communication occurs within the home due to parents' desire to have their children in a safe place that they could easily monitor.

Even though mobile phones provide safety and security to their children according to the parents, children, especially teenagers have felt that their independence and autonomy were invaded by their parents as they call them at any time (Ling 2012). The children must also obey the rules set by their parents because it is the parents who pay their mobile bills (Castells, Fernandez-Ardevol, Qiu, & Sey 2009). Hence, mobile phones act as 'an extended umbilical cord' (United Nations 2003: 322; Weerakkody 2009: 51) in keeping children within the reach of parents. On the other hand, mobile phones were found to be an empowering tool for young people in the United States because it allows them to be independent and more interactive with their peers (Ekin 2003 cited in Castells, Fernandez-Ardevol, Qiu, & Sey 2009). Explaining this paradox role of mobile phones in family communication, Lorente (2002: 6-8) refers to the mobile phone as the keeper and the breaker of family ties.

Some mothers thought that their teenaged children should be given space to experience the world allowing them to learn to be independent. Yet, they also thought that teens must be protected from dangers during the years children would be prone to vulnerabilities easily (Ling 2012). Further, some parents also had concerns on children's ability to contact their parents immediately by owning mobile phones because then children would not develop necessary skills to make their own decisions, take risks or to face problems in the real world (Ling 2012). Weerakkody (2009) found that since children started going out with friends on Saturday nights from the age of about 15 years as a part of their socialization process, they often contacted their parents to pick them up in late nights because the public transportations were not available, taxis were expensive or they have consumed alcohol. Thus, parents were also unable to leave home in weekends. Hence, parents too faced a paradox in their mobile communication with their teenaged children. However, in many Asian, Middle East and Africans countries, teenagers are considered as children whom should be protected and taken care of from many external harms.

On contrary to the findings of above studies, Yoon (2003) found that in South Korea fathers did not talk to the mobile phones of their children (high school students) directly because of the patriarchal family and hierarchical social structure. Instead, fathers would talk to the mothers requesting to pass the desired message to the child. Further, the parents would have their control over their teenaged children by giving them directions and checking on their movements because parents pay their bills and gift mobile phones. Hence, the existing power relations are reinforced through the mobile phone use which Yoon terms as 'immobilize the mobile' or 'retraditionalizing the mobile'. Even in the United States, teenagers contact their parents and friends more or less equally (Fattah 2003; Bautsch et al. 2001 cited in Castells, Fernandez-Ardevol, Qiu, & Sey 2009).

Further, the studies conducted in more conservative societies indicate that the ownership of mobile phones particularly by young girls is very much restricted. For instance, in India it was found that some parents in rural Rajasthan wanted to have their daughters married in under age because they did not want them to elope with low caste boys due to unapproved affairs taken over the mobile phone, a father killing her daughter for chatting with a boy through mobile phone, the community male elders banning the use of mobile phones by unmarried women fearing that they would elope with low caste men (Kärki 2013 cited in Doron & Jeffrey 2013; Jouhki 2013; Tenhunen 2014). A village elder in Uttar Pradesh had justified the rape incident in Delhi as a consequence of freedom given to girls from the mobile phone to behave in 'wild manner' (Doron & Jeffrey 2013: 167).

Tacchi (2014) found a young female graduate had to stop going to work because of constant surveillance of her mother and due to the embarrassment she felt when her mother came to her office one day because her male boss gave a call to the girl in night the day before regarding some work. However, the smart phone used by the girl had allowed her to make friends with the outside world without the knowledge of her mother who was ignorant of Internet or any other social networks. While the Palestinian teenage Muslim girls in Israel were gifted mobile phones from their boyfriends (Hijazi-Omari & Ribak 2008), in Egypt, young girls borrowed their neighbours' mobile phone to be used with the SIM card given by their boyfriends because their families did not allow them to use a mobile phone fearing that they would find a boyfriend without parents' approval (GSMA mWomen 2012). Hence, as Castells, Fernandez-Ardevol and Qiu (2009: 147) claim 'the wireless communication technology modifies but does not eliminate the power relations between parents and children'.

However, both in advanced and conservative societies, the older mobile phone users were often found to be helped by the youngsters in adopting the device (Tenhunen 2014; Johuki 2013; Fortunati & Manganelli 2002; Vershinskaya 2002). Meanwhile, from the feminist perspective, there is also another debate that the mobile phone had actually reinforced the traditional gender roles of mothers making them on call all the time and thus to perform remote parenting (Rakow & Navarrow 1993; Hjorth 2008).

Hence, the existing literature emphasises the paradox that the parents and children experience in their mobile communication. Further, it become obvious that the mobile phone use of the children is closely associated with the particular cultures of each country. However, there is a gap in the literature on how the mothers perceive the children's use of mobile phones in more traditional and conservative societies dealing with their expected roles as mothers.

Methodology

The data required for the present study were retrieved from a large scale research study conducted for a PhD project on the empowerment potentials of mobile phones for female heads of households in Trincomalee, Sri Lanka. This qualitative study used methodological and theoretical triangulation (Denzin 1970; Neuman 2011: 164-5; Silverman 2006: 291-2) because it was based on the critical and interpretive theoretical paradigms and the data collection involved 30 in-depth interviews (10 each drawn from among the Sinhalese, Tamils and Muslims) and six focus group discussions (FGD) (six to- nine participants in each and a total of 41 individuals) with female heads of households in two Divisional Secretary's (DS) Divisions in the area- viz. Trincomalee Town & Gravets and Kinniya of the Trincomalee District. This district is an ethnically and culturally diverse and has been significantly transformed by the civil war (1983-2009) and the 2004 Boxing day Tsunami. Out of its 11 DS divisions, above two were chosen as they recorded the highest number of widows living in the region.

The purposive and snowball sampling or referral methods (Flick 2009; Patton 2005) were used to identify and recruit participants with the help of local informants based on the following criteria: they own or have used a mobile phone in previous three months; and are female heads of households. Data collection was conducted between September, 2014 to February, 2015. The participants represent different categories of female heads of households such as widows (due to war, Tsunami and other reasons); divorced/separated/ deserted women; never married women; and women whose husbands have migrated elsewhere and living within or outside the country for work or other reasons. Thus, the participants were a diverse group based on their socio-economic status, education, income levels, religion, employment and income-earning status, and age. The project obtained ethics clearance for high risk projects via the Deakin University Human Research Ethics Committee (DUHREC) (Reference Number 2014 -125). The Grounded theory method (Corbin & Strauss 2008; Glaser & Strauss 1967; Strauss & Corbin 1990)-a systematic method of data analysis and constructing theories grounded in the data was used to analyse transcribed interviews and focus group discussions.

Findings & Discussion

Many participants used their mobile phones to manage and coordinate their children's affairs and thus to be reassured about the wellbeing of their children. And only two participants had bought mobile phones to their teenaged children. However, since children did not own a mobile phone or did not take their mobile phone to the schools and after school extra classes, many participants had given their mobile numbers to the teachers and the drivers of school buses, vans or three-wheelers.

Participants were helped and advised by their children when adopting the device. On the other hand, however, participants' discussions on their children's use of mobile phones indicated that they feared the unknown that was familiar to their children. Hence, they had ambiguous feelings on their children's use of mobile phone.

For instance, Pushpa, a 36 years old, Sinhalese military wife often sought help by her 12 years old son each time she had a problem with her mobile phone or in changing interface picture and she was actually proud of her son's knowledge of mobile technology despite her restrictions of its use by him.

> Pushpa*: …now my son, it is not that I've given him the phone, he only has taken it for a while from here and there, he knows everything in my phone, even the things that I don't know, children are more matured than us and they learn and find out things faster,… now, even if we use mobiles, we're not addicted to it, we use it only to our purposes, children are not like that, when they get it, they would press, press and press, and then would find out everything, now we have these household things, so, mobile is not essential to us*

Jouhki (2013: 47) also found that women complained about young people's 'over-using' of mobile phones – to play games, talk with friends and for entertainment, 'forgetting its real purpose' - to communicate or gather information and with Chib and Chen (2011: 492) that (adult) female mobile users in developing countries are concerned of too much of use of mobile phones (by younger people).

Pushpa often had arguments with her son about using her mobile phone as:

> *I tell him, 'don't break it, it's for talking, so, don't do other things with it, it is enough if we can talk using it'… that's why I've been using this so far* [laughs]

Hence, the mobile phone is seen as something to be kept away from the young, as Pushpa feared they would be damaged or broken, as with any new and relatively expensive and essential technological tool, when first introduced to a given society.

Further, Pushpa would not wish to upgrade her mobile phone because of her son.

Pushpa: *My husband asked me whether to buy me a smart phone, because he could pay for it in instalments… one with everything-video, that 'touch phones' … I said, 'Oh...no, I don't want', this one is better than that… (if you have such a (sophisticated) one… you can't control the children (suing it and wasting their time)…, (I need) my phone…only to talk to someone…, If I get (a smart phone), I can't keep an eye on it all of the time, I don't know what (my son will do with it without my knowledge*

Ranooza did not wish to buy her own mobile phone because:

> *I have children…they are studying… If I had a phone, they would take it and start playing games. They'd shout at me if they were not given it… so I didn't buy one*(a Muslim, 24, housewife, husband worked abroad)

During the interview with Gayani (38, a Sinhalese government employee), her seven year old son took one of her mobile phones lying on the table and went away. She called her son several times asking him to bring it back telling the researcher it was very difficult to keep her son away from the mobile phone. Later, when asked whether Gayani allowed her children to use it, she was adamant she did not allow her children to use it.

In fact, Pratheepa had no working phone with her at the time of the interview because

> *…it was such a trouble, so, I just smashed the phone…only thing he (her son) does is playing games, all of the time, doesn't study, I got really angry and I broke it…it's difficult to keep a phone at home.* (47, Tamil, self-employed)

The absence of a mobile phone made Pratheepa miss a few essential calls requesting her to attend meetings by the welfare organisations that she was a member of. Thus, punishing her son led to a disadvantage for her. Yet, she was trying to decide whether to repair it or leave it as it was.

This also indicates where parents would find themselves losing control their children's use of specific technologies and sometimes destroy the equipment in frustration. This may also indicate the parents' limited understanding and knowledge of the uses and advantages of these technologies and their functions in life because participants simply appear to view these technologies as 'time wasters' or 'leading to trouble' as found by Jouhki (2013: 51).

Azhara (33, Muslim housewife whose husband worked abroad) and Mizra (35, Muslim, a divorcee) did not allow their teenaged sons to use their mobile phone because they were 'still school going children' even though Azhara had been very much helped by her son in adopting her new smart phone. Another participant admit that her son could not pass the G.C.E A/L (Grade 12) examination because he became 'addicted' to the mobile phone that was gifted to him by a relative after passing his G.C.E. O/L (Grade 10) examination well.

Participants of the first Sinhalese FGD had begun using their mobile phones because of their children and still used it mainly because of them to stay informed about any delays in returning home and almost all strongly claimed not allowing their children to use a mobile phone. However, they faced a dilemma about letting them use mobile phones with one explaining her ambiguity as:

> *For a greater extend, we had been relieved from the burning pain we had to suffer in the past because now they (children) could give us a message at least from their teachers' mobile phones, … we 're not rich enough to buy mobile phones for them…, (but) we would never give a mobile to our children…,*

If their children wanted to make a call to a teacher, they would seek permission to use their (mothers') phones or they would ask the mothers to make the call. If children called their parents from a teachers' mobile phone, the latter would make the call and give the phone to the student and stand beside the child until the call was concluded. At school parents' meetings, according to participants, parents were blamed by teachers for allowing children to use mobile phones. Once, Amila (30, a Sinhalese) became desperate when her mobile phone was dropped in water and got wet. Then, her eldest son advised her not to switch it on immediately and to keep it in the sun for a day before using it and Amila was relieved and happy when her phone worked as before afterwards. She had even bought a simple handset to her elder son. Yet, he was not allowed to take it to school or tuition classes.

Meanwhile, mothers with teenage daughters such as Amudha (48, Tamil) and Fathima (45, Muslim) were often helped by their daughters in choosing SIM card, mobile packages, changing settings or applying caller-block options. Amudha's two elder daughters even had their own mobile phones. However, when asked whether her daughters had mobile phones, Amudha promptly mentioned none of them did and Fathima said:

> *If my daughter (19 years old) needs to talk to her schoolteachers... I'd make the call first and then I'd give it to her... I don't allow my (two younger daughters) to do anything on the phone, they're not allowed even to touch it...*

Vanathy (34, Tamil) who was responsible for two teenage daughters had completely banned them to use or touch a mobile phone and allowed them access only their landline telephone, for which they must seek her permission prior to use. Her daughters were not allowed to answer any incoming calls to the landline telephone and sometimes, she stood beside them until they finish calling their friends and checked the detailed monthly bill from the service provider of the landline because she was 'afraid', probably of boyfriends and thereby damaging their 'reputations' within a conservative setting.

> *Now, if I have to stay out for several hours or if I have to go out for an emergency, I don't know what was going on here, wrong things can also be happened because of the phones, so, that's why...*

The mobile phone had become the scapegoat for several incidents involving young people in romantic relationships that took place within the research site. For instance, two young girls 18 and 20 had committed suicide out of shame, when they realised they had fallen in love and were in relationships with the same boy. The love affairs had been initiated and maintained mainly over the mobile phone. In the second Sinhalese FGD, participants talked about many young girls and boys eloping after commencing romantic relationships over the mobile phone in their area who had not actually seen each other until the day they eloped.

However, romantic relationships between young people and elopements are not something new to this setting or anywhere else in the country or the world. Many young couples in the past would conduct such activities without using any technologies. Hence, this is another case where a new technology is blamed for a phenomenon that had already existed. However, the mobile phone can make such activities easier to conduct and hide from others.

Conclusion

Similar to the parents in the West, these participants also mainly used their mobile phones to handle and coordinate their children's safety and education. However, on contrary to the findings in advanced countries, it becomes evident that the ownership of mobile phones by children is not accepted in the research site. Even the use of mobile phones by the children has been considerably discouraged by the mothers. Because of their limited understanding of the technology, the use of mobile phones by the children is perceived as a waste of time and as a mean to form an unapproved love affair with the opposite sex. Further, none of the participant thought their children would experience a technological divide in the future as parents thought in the advanced countries. However, they were very much helped by their techno-savvy children in their adoption of the mobile phone. Consequently their power and control over their children's mobile phone usage had become problematic.

The ambiguous feelings of the participants vividly symbolise the social desirability effect of maintaining their expected role as mothers because providing a proper education to their children is considered as an utmost responsibility of the mothers in Sri Lanka. The popular media also portray technology, particularly smart phones as a disruption to children's education. However, the younger generation in the setting had become techno-savvy confirming Fortunati and Taipale's (2012) that young means 'being technologically equipped regardless of gender' (2012: 539).

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The Effect of Learning Environment on Learning English as a Second Language

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Abstract

The research aims to find out 'The Effect of Learning Environment on Learning English as a Second Language'. The study examines the perceptions of the undergraduates of the Faculty of Visual Arts, University of the Visual and Performing Arts, on their needs and preferences of the environment for learning English. In addition, the perspectives of teachers of English in universities are also sought to find out the same. The findings revealed that even though students showed interest to learn English, the environment was not very conducive to the learning of it for everyone. While some had the support to learn English from home and school and at the university level as well, there was no sufficient motivation manifested through their performance and attendance to learn it either. Students showed their concern towards having less number of hours for English language learning at the university, which in turn hindered their exposure to both the English language and English language learning environment. Moreover, they seem to be not well aware of the potential utility of English for their professional development.

Key words: Learning environment, background, teachers, potential utility, exposure

Introduction

United Nations Educational, Scientific and Cultural Organization charter for education defines learning environment, "Learning takes place in multiple settings and the learning environment can be structured or unstructured and the learning in different environments can complement each other."[1]

01. (www.unesco.org/new/en/education/themes/strengthening.../learning-environment/).

Learning environment may range from a classroom that consists of a teacher and students doing a lesson or a teacher and students learning under a tree to a highly sophisticated classroom with computers and other hi-tech devises used for teaching.

The most relevant aspects of learning environments found in the literature include (a) the physical context in which learning and instruction occur (b) the division of roles between teacher and learner (c) the roles of learners in relation to each other (d) learning goals (e) the teacher's method of instruction (f) the tasks to be performed by

the students (g)the materials used and the roles they play (Anderson 1989; Reigeluth 1983;)

The research is carried out to investigate the effect of the learning environment on learning English as a second language. The sample consists of the second year undergraduates of the Faculty of Visual Arts, University of the Visual and Performing Arts.

Teachers and researchers in the English language teaching (ELT) field are always interested in finding factors that facilitate or prevent students from deep involvement in learning. This research examines the influence of learning environment that makes students deeply involved in learning English. Also it aims to find out the factors related to learning environment that makes students less involved in learning English as well.

Research objectives

The research objectives of the study are,

1) to find out whether undergraduates are interested in learning English at the university,

2) to find out whether there had been sufficient resources (teachers, text books, etc.) to learn English during the students' school career,

3) to examine the nature of methods and approaches that were used for teaching English during schooling and their effectiveness,

4) to find out whether the environment during their student life (school and university) and at home was conducive to learn English.

5) to find out the awareness among the student community on the utility value of English.

6) to make recommendations based on the findings of the study in order to improve the quality of the learning environment in ELT.

Methodology

Questionnaires and unstructured interviews were used to collect data. The sample consisted of 30 undergraduates of the University of the Visual and the Performing Arts and 10 teachers of English in local State universities. The undergraduates were given the questionnaire and the teachers were interviewed.

The selection of the teachers was random from four universities namely, University of the Visual and Performing Arts, University of Kelaniya, University of Colombo and University of Rajarata.The students forthe sample were selected based on the convenience of timethey had for answering the questionnaire.

The objective of the Questionnaire given to the students was to find information on the students' attitude of English and the history of students' vis-à-vis on learning English at school level. There were a lot of interesting facts related to the School education back ground, the way they learnt English language in their respective schools and students' home environment.

Even though the selected sample of students are from the same group all the students did not belong to same age category. Their age range ran from 22 years to 26 years. And in the sample there were eight (08) male students and twenty two (22) female students.

One of the hypotheses was to find how students' past learning experiences effected their motivation to learn English before coming to the University.

Table 3.1 Questionnaire for students

Questions	**Objective**
1,2,3 and 5	to investigate the personal background of the students
4	to find out whether undergraduates are interested in learning English in the University
6 and 7	to find out whether there were teachers of English in students' primary and secondary level of education
8	to investigate the personal background of the students
9,10,11,16,17,18, and 19	to find out whether the environment during school and university was /is conducive in learning English
12,13,14,15 and 20	to find out the present learning experience at the University or how English as a second language education works within the university context.

The interviews were conducted in such a way that the teachers' view of the effect of learning environment and teaching English as a second language in the respective universities were captured. Moreover, questions were designed in such a way that the teachers were expected to talk about the particular methodology they applied when teaching English as a second language and their interaction with the students' community. Their awareness of the concept of learning environment was one of the aspects these interviews tried to capture.

Analysis and Discussion

Hundred percent of the undergraduates (100%) stated that they were interested in learning English. This seems contradictory to what the researcher finds in the actual class attendance which is unsatisfactory.

It was revealed that there was an unavailability of teachers of English during the student's primary and secondary level of Education. Since there was an absence of an English language learning environment altogether, it would have, in turn, created a distance between the students and English resulted in lack of motivation to learn and low performance in English.

A majority of the undergraduates seem to think that the methodology used in teaching English in their respective schools and also in the university is satisfactory. However, when comparing the low attendance for English lectures in the university, it should be important to find out the other factors that contribute to their absence.

The majority of the students seem to have a good support from both home and school to learn English. Only 20% of the sample stated that the learning environment during schooling and the support from home were not motivating enough to learn the language. The students stated that the time allocated of English language at the university is not adequate.

A large majority of the students seem to be unaware of the potential utility of English. This could be attributed to the fact that the undergraduates are in the Performing Arts which do not require language as a medium for their performance.

As per the theoretical underpinnings that were outlined before, some oAs per the theoretical underpinnings that were outlined before, some of the most relevant aspects of learning environments, namely, a) the physical context in which learning and instruction occur (b) the division of roles between teacher and learner (c) the roles of learners in relation to each other (d) learning goals (e) the teacher's method of instruction (f) the tasks to be performed by the students (g) the materials used and the roles they play (Anderson 1989; Reigeluth 1983;) seem to be absent when students do not have a teacher to learn English from as well as with lack of exposure to English resulting from the insufficient number of hours for learning. In addition, when students are not aware of the potential utility of English as a medium for furthering their career, the motivation to learn English seems to get diluted despite their obvious liking to learn English.

Students' learning environment in school and at the university seems to affect their English language learning process. At the same time, students have not identified English as an important medium to further their professional development resulting in their lack of motivation to learn English.

Recommendations

This adheres to one of the research questions that gave rise to the present research: how can the faculty of Visual Arts of the University of the Visual and Performing Arts enhance and improve the learning environment of its undergraduates when learning English as a second language.

1) Pivotal role of the undergraduates in the University

Students in a language learning class play a very important role as the whole language learning process is designed for them. Since English language plays the role of lingua franca in the modern world, one gets utmost benefits by learning English. In the fields of trade and finance, travelling, education and diplomacy,

English becomes the language that bonds the parties involved in. So, the Undergraduates in the University should not avoid the potential opportunities in the future and should arm oneself with the knowledge needed.

2) Availability of the English teachers in the Government Schools

When looking in to the past learning experiences of the undergraduates in the faculty, it is worthy noticing the un-availability of the English language teachers continuously in their schools had an adverse effect on their language learning skills. This fact is proved with the findings of the present study where only 20% of the respondents mentioned that they did not have English language teachers in their respective schools.

Schools as an institution need to have a better understanding to empower their staff to give an uninterrupted service to the students. If this was not done the motivation of the students to learn the language deteriorate as time passes. Ministry of Education in case of National schools and provincial councils together with provincial education officers should be vigilant to provide teacher to their respective schools.

3) Curriculum Revision and Application of new methodologies for teaching ESL

Curriculum revision and new methodologies to teach English for the Undergraduates in the faculty is done from time to time when needed. The latest trend in the language learning process is student centered approach and English teaching unit in the University is working its level best to disseminate knowledge to the Undergraduates by applying new methodologies in ESL.

4) Support from the home environment

Parents are the first teachers of their children, they understand the value the knowledge their children absorbs. Parents need to realize the importance of learning English language and should help their children to acquire good knowledge in the language. They could show them a good path to achieve something very valuable like English language skills to their children.

5) Awareness raising in the higher authorities of the University

Proper awareness among higher authorities on any concept or practice makes it easy to put that particular concept into operation. Most of the time, the higher authorities are not aware of the issues related to the learning environment. Awareness raising among the hierarchy of the administrative structure of the University is essential in improving the learning environment of the Faculty level.

Once the administration is concerned about the concept of learning environment and its effect on the students' empowerment in language skills, the process would be more effective.

6) Institutional policy related to the enhancement and improvement the learning environment of students who learn ESL

The logo of the Ministry of higher education in Sri Lanka is “beyond the horizon ’’ and it is very clear that Ministry takes utmost effort to enhance the education of the undergraduates.

The target is to empower them to be more employable. To achieve this, ministry of higher education has introduced English language and Information technology courses to be made compulsory course units in all the state universities.

Although such measures were taken, these courses still do not carry a scoring weight in the general curricula of the degree program, thus creating lethargy in attendance and following these course units. It is therefore necessary to establish a very strong policy related to English language learning and ICT skills. In such case the learning environment should be made conductive to the student population of the universities. The higher education ministry needs to make state policies to implement strategic enhancement programs to undergraduates. Given below are some of the recommendations to make such policy a reality.

(i) Completion and passing the standards of English language equirements should be made compulsory with an added clause to make sure that the graduation would be withheld until the completion of the required course units.

(ii) Further the English language course as well as the ICT course should carry credits to the final grades and GPA of the students.

(iii) Sufficient time slots should be allocated within the standard time table with no exceptions to be removed or changed according to a request or to accommodate major subjects.

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Enhancing And Characterizing Paintings: A Computational Aesthetic Approach

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Abstract

The recent developments of the emerging digital media technology have significantly influenced all spheres of life. Some of these technologies have enabled modern computer systems to act, or more precisely to respond as humans especially in the areas where human intelligence is essential, for example aesthetic appreciation of art, music or any other form of fine arts. In the area of Visual Arts, integration of digital images with creative works is one of the key processes. In order to improve their efficiency and achieve high quality in their creative works, designers usually embed digital images of digital paintings adapted by using digital image processing techniques. One of the major requirements that we need to satisfy in this type of applications is balancing the aesthetic quality while maintaining the other aspects such as interpretation, creativity of those creations. Information digitization has resulted in high availability of digital images of painting that belong to diverse categories in the Internet without any intellectual property restrictions. Therefore, it is very important and useful to have image processing applications to capture and to model the aesthetic quality of images, so that the human designer is aware of how the aesthetic quality is affected by different image processing techniques. As the work reported in the literature is significantly little, it is expected to explore this area further in this research with a motivation of developing a computational aesthetic model to deal with visual aesthetic quality of digital images of paintings. Computational aesthetics is the research of computational methods that can make applicable aesthetic decisions in a similar fashion as human can (Florian 2005). Based on the literature survey, Analytic Hierarchy Process (AHP) was selected as the most successful methodology to solve this problem. AHP considers both qualitative and quantitative approaches. The major outcome of the research is the suggested framework to enhance and characterize a painting in the area of computational aesthetics.

Introduction

Aesthetic characteristics are the most important concerns in several areas where human involvement plays a major role in selecting and enhancing a quality output. It is a subject area that everyone likes as it is inbuilt to human beings. With the technological advancement, the computer is used as a tool to perform different types of tasks efficiently. However, it is needed to introduce particular algorithms depending on the nature of the problem using the available techniques in Information Technology (IT).

As soon as measurement comes into concern, there are three questions to be answered: (1) what to measure; (2) how to measure; and (3) the quantitative representation of the measurement results. Unlike in many other design fields above, three questions can hardly be answered in the aesthetic design field at a first glance. There are a couple of reasons behind the situation. First, a common belief is that human mind is "intangible"; any attempt to quantify and measure human aesthetic sense is considered futile. Second, although aesthetics has been qualitatively studied in many non-engineering fields, such as psychology, sociology, philosophy and even anthropology, it has not been studied that much in computer science field. Third, there are also challenges in dealing with race, culture, religion, age, gender and so on. Fourth, a consumer's aesthetic preference contains dynamic patterns which change over the time; they are called "trend" which are difficult to measure and predict in an accurate manner. Despite the issues behind this research, major aim of this research is to find any model or approach to compute the aesthetic value of an artwork like a painting that will be of great use for the efficient and effective evaluation and enhancement of the aesthetic characteristics of such products.

Literature Review

In this research, many existing models and frameworks in the area of computational aesthetics were studied with the aim of identifying a possible approach for characterizing and enhancing a painting. Although several attempts have already been made for assessing and computing aesthetic values, the effort for the enhancement of aesthetic values is still in its infancy. Attempts have been made in the areas of landscape planning and management (Tyrvainen & Tahvanainen 1999), computer aided conceptual design (Breemen et al. 1998; Knoop et al. 1998; Machado & Cardoso 1998; Pham 1999), garment and fashion industry (Helena & Lubbe 2008; Hethorn 2005), entertainment industry (Wages et al. 2004), etc.

The three main approaches identified and proposed were the models associated with AHP, Machine Learning and Extended AHP. Ultimately, it was justified that Extended AHP method produces the most suitable solution for the current research problem.

Although computing aesthetics or aesthetic enhancement would require for several areas like product design, garment and fashion industry, our research is mainly concerning the area of paintings in the field of visual arts. This study focuses solely on the aesthetic design or preferences of the targeted population, society or human being by taking the compact view of individual's aesthetic preference.

It is therefore assumed that aesthetic preferences are either homogenous which means there are common aesthetic preferences that are universal across all members in a group, whereas each member in the group has its distinctive aesthetic preferences in addition to the common aesthetic preferences. The common aesthetic preferences are focused in this study. Distinctive aesthetic preferences which vary upon an individual consumer's profile (race, culture, religion, age and gender) are temporarily excluded in this study but it can be considered as a future enhancement of this research.

Methodology

There are two major research methods that are employed by researchers for their various problems to be worked out. They are called qualitative approach and quantitative approach. Depending on the research problem, availability of certain theories or concepts, available observations or objectives of the research, most suitable approach will have to be selected at the beginning. At the same time, it is required to balance pros and cons of those two approaches when the decision is taken. Another important point is the hypothesis to be formulated for the particular research.

Qualitative research is for exploring and understanding the meaning of individuals or groups ascribed to a social or human problem and it is especially effective in obtaining culturally specific information about the values, opinions, behaviors, and social contexts of a particular population.

Data are collected by using several research design mechanisms such as field researches, literature reviews, and informal discussions with participants, more formal approaches through in-depth interviews, focus groups, projective methods, case studies or pilot studies. Under the qualitative approach, there can be various types of research designs like illustrative method, analytic comparison, and network analysis.

The quantitative research method involves a perfect measurement and data which is in the form of numbers and statistics (Atieno 2009). There are two methods of research designs applicable with quantitative method (Creswell 2003). Survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. Experimental design is used to test the impact of a treatment (or an intervention) on an outcome, controlling all other factors that might influence such an outcome.

Due to the inherent features of those two major approaches, one can't refrain from getting disadvantages in terms of data gathering, data analysis or generalization as a theory within a particular area of study. Since last decades, there have been some problems and dissension arisen among the research methodology which was used in educational research. Some authors have called this period an era of "paradigm wars and their aftermath" (Hammersley 1992). Consequently, there has been a criticism on the quality of the practices which make the educational research in all countries (Niglas 2004). These methodological issues have been affected directly to the nature and functions of educational researches. Qualitative and quantitative

researches often operate with a different set of assumptions about the world and ways of learning about it. These assumptions may be seen as mutually exclusive. Even though, researchers are often taught to master only one type of method, due to the methodological issues in educational research sector, there is a requirement to find an alternative approach by combining two major approaches.

AHP methodology

AHP aims at computing weights of selected elements. Weighting of elements has two major advantages: It helps to prioritize the elements to determine key elements and it can be used to make more accurate decisions. It derives ratio scales from paired comparisons. The input can be obtained from actual measurements such as price, weight, etc., or from subjective opinions such as satisfaction feelings and preference.

All steps related to AHP technique were applied with a view to finding the painting which is having the best visual aesthetic value out of the other selected paintings. Then, by applying the reverse engineering technique, it is apparent that there should be computed weights of factors (parameters) in the selected painting to achieve such quality product when compared to others. As a result of that, key factors can be identified and the weights of those elements could be utilized for the purpose of enhancing other compared digital images of paintings to the same level as to the level of selected one in terms of visual aesthetics value.

Defining the decision problem

Following first step in AHP method, problem was defined as “choose the best painting of highest visual aesthetic value”. Then, the conceptual framework was established by decomposing the main objective to criteria and sub criteria (levels and sub levels).

Developing a conceptual framework

This involves decomposing the complexity of the problem into different levels or components and synthesizing the relations of components. Specifically, decomposition of a problem refers to the aggregation of similar information into different groups while the synthesis of relations is the integration of them in a systematic way.

Setting up the decision hierarchy

This is the most critical step in this methodology as the selection of most important factors and sub factors are playing the major role in this scenario. Therefore, a preliminary survey was conducted by selecting experts in the subject area for the purpose of setting up the decision hierarchy. As a result of that, expert knowledge was gathered to establish the hierarchy of factors and alternatives. By analyzing that preliminary survey and by referring some of the research papers related to the area of study, it was able to select parameters (attributes) that are most significant to the visual aesthetics value (form) of artwork (painting). They are color, contrast, brightness, shape and texture (brushstroke) (figure 01). In addition to that, composition and style will also be another two attributes that the artist should concern at the initial designing stage of his/her painting product.

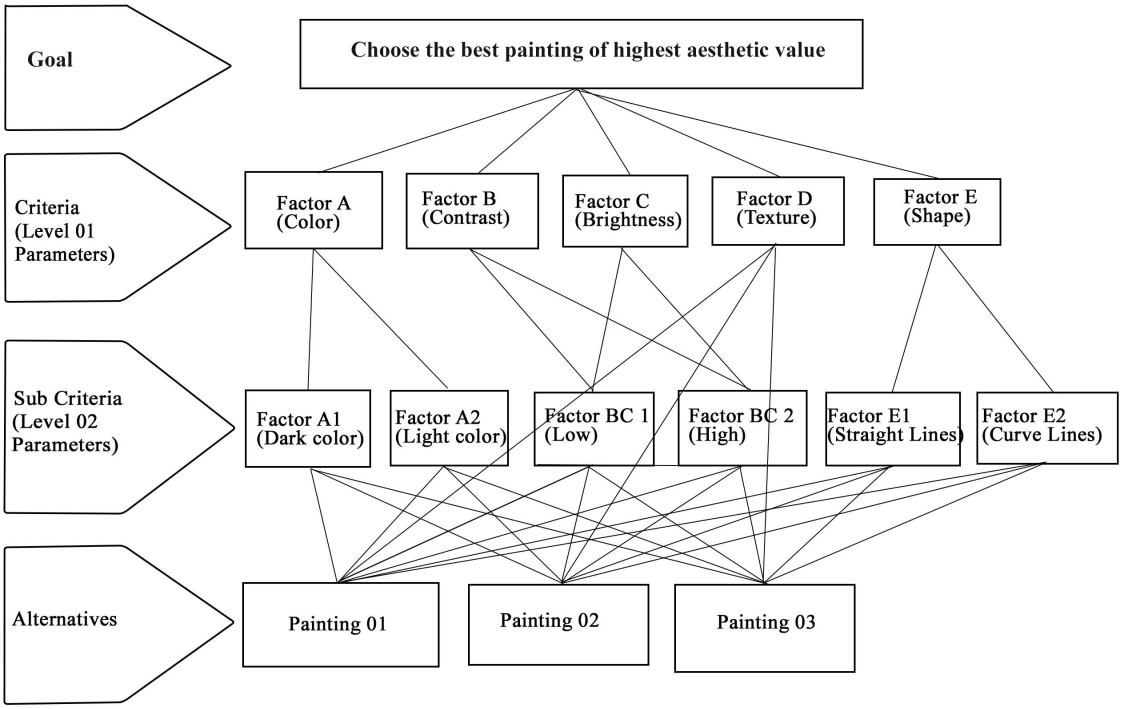

Figure 1: AHP Architecture (Assumption: comparing 3 paintings of a particular group)

This survey was useful to identify the diverse existing views on the meaning of aesthetic value and the techniques used by practitioners to enhance the aesthetic value. Specially, in the enhancement of aesthetic value, only parameters which can be adjusted as low level attributes should be considered. In addition to the above two findings, it was able to reveal that there are some aesthetic principles which can be balanced using the different contributions of those attributes. According to Pham (1999), nine aesthetic principles have been identified to fine-tune interaction between the aesthetic properties and the design parameters. Nine principles are as follows.

- Balance
- Proportion
- Alternation
- Continuity
- Solidity
- Simplicity
- Dynamics
- Rhythm
- Dominance

When these aesthetic principles are referred, it is clear that they are quite abstract level (high level) ideas and most of them are representation of a compact view of low level factors related to the form of a painting. Therefore, they are difficult to be measured or to be quantified in terms of aesthetics. Thus, it is expected that the artist should concern about this and balance them at the designing stage of his/her painting or any other artistic product. What we are really considered in this research, however, is to quantify (or to find weights) the most critical low-level attributes (factors) by using a suitable technique or approach.

Extended AHP method for painting comparisons

In the AHP approach, based on the problem identified, data is collected from the participants in the subject area and AHP calculations were performed according to the mathematical procedure. Therefore, this is not a general approach because comparisons are limited only for the cases similar to the survey data neglecting the specialties inbuilt with the available digital image of paintings to be compared. So, major concerns set out to the core reasons identified in thisapproach that prevent from obtaining a steady result for the existing problem.

So, author's plan was to go beyond the limitation of the AHP technique providing more rooms to accommodate comparisons to the diverse category of paintings which are used in the practical artwork creations. One of the possible solutions is to develop a tool (system) to get online response from the user/users for each and every case separately and do the relevant comparisons for the given set of paintings. Accordingly, tool will use the proposed AHP concept as the core theory and do all the required calculation to rank the given set of paintings. To proof the concept, comparison has limited only for three digital images of paintings. Architecture of the proposed tool under this approach is given below (figure 2).

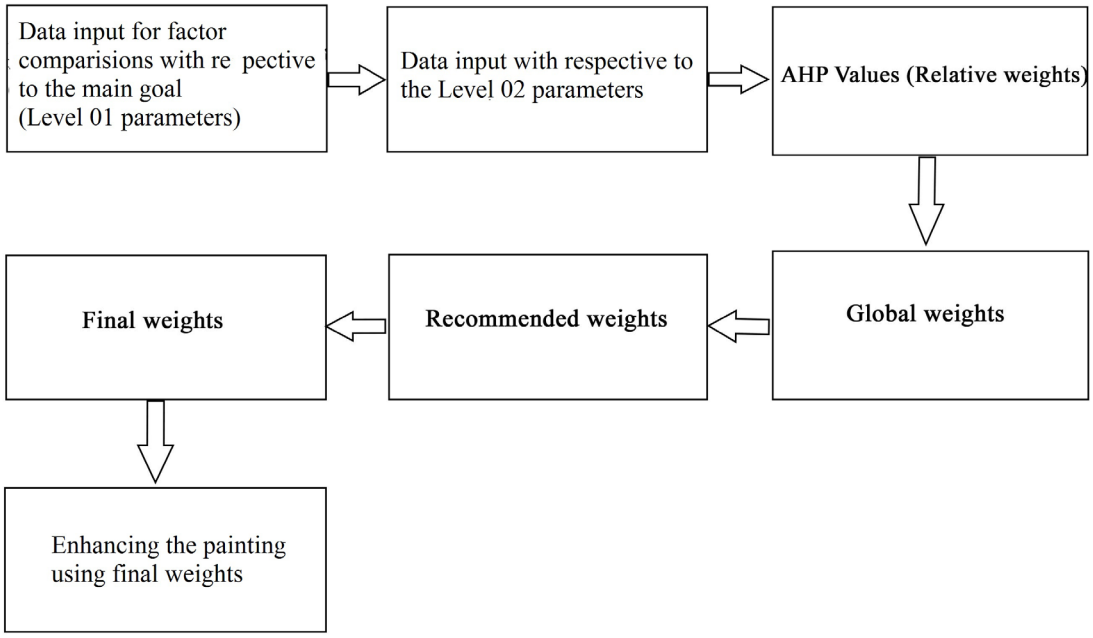

Figure 2: Architecture of extended AHP model

Using this extended AHP method AHP values can be calculated. Based on the values final weights can be calculated to enhance the paintings.

Discussion & Conclusion

Authors attempted to justify the most critical set of attributes for the visual aesthetic value of a digital image of a painting. Therefore, they conducted a preliminary survey by using a set of participants in the area of study at the beginning of the research. Additionally, another three surveys were conducted for three selected groups which have dynamic views in this area of study. Ultimately, they were able to come with a decision that color, shape, texture, contrast and brightness are the main factors required to be considered in the high-level for the aesthetic area. Within the research, Authors were able to develop a new approach called AHP. By applying this technique, a hierarchy of attributes was set up and data were collected following the procedure of the AHP theory. Finally, it was possible to identify the individual parameter contributions of selected parameters in the hierarchy to achieve the painting which is having the best visual aesthetic value compared to other paintings. Then, an extended AHP approach was selected to utilize the strengths of AHP technique and to go beyond the limitation up to a realistic level for the benefit of user. Following an extended AHP approach, a tool was developed and it was able to obtain a set of weights related to selected attributes which are based on theoretical foundation. Based on the above justification, it can be concluded that the authors have achieved a good quality result for the research problem. This work is mainly meant to provide a new framework to characterize a painting in terms of visual aesthetic quality. Further, it aims to inspire more interests in this new fundamentally important and challenging research area.

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Adding 6DOF Motion Perception to a 2D Image Sequence Using a Haptic Device

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Abstract

Haptic technologies play a vital role in modern multimedia applications. Apart from the senses of seeing and hearing, we can incorporate the other sense such as feeling, smelling and tasting into a 2D image sequence using haptic technologies. In this paper, we discuss how to get the haptic perception of feeling the movement of objects in an image sequence, with the objective of enhancing the viewing experience of viewers to the near real world level. We proposed a method to feel the 6DOF motion of objects. Hence we proposed two methods for haptic motion rendering i.e. linear gain controller method and nonlinear gain controller method with the use of linear velocity and angular velocity parameters of the objects in the image sequence. Result of the experimental evaluation shows that the nonlinear gain controller method is better than linear gain controller method for 6DOF motion rendering.

Keywords

Virtual reality, multimedia application, haptics, video processing, motion rendering, computer vision, image processing

Introduction

Nowadays, humans' interest to use innovative technologies to create virtual worlds beyond the real worlds has grown significantly. Among them, haptic technologies play a vital role in virtual reality applications. Haptic technologies enable users to interact with objects in a virtual world. The process, which enable users to touch, feel and manipulate virtual objects through haptic interface called as haptic rendering (Basdogan & Srinivasan 2001). Rather than traditional interfaces that provide visual and auditory information, haptic interfaces can generate mechanical signals, which stimulate human kinesthetic and touch channels (Hayward et al. 2004). Various types of haptic interfaces exist and they are being used for different kinds of virtual reality applications. Few of them namely PHANTOM, Falcon, Delta and SPIDAR, are shown in Figure 1. Even though, haptic technologies are being used in wide range of application areas such as in training (Basdogan et al. 2004) (Wu, Wang & Zhang 2009), education (Sato et al. 2008), entertainment and 3D interaction (Morris, Joshi & Salisbury 2004), it has not being adequately used in modern multimedia applications. Most systems still rely on only two senses of seeing and hearing out of five basic senses of human

nature in creating user experiences. Apart from the senses of seeing and hearing, there exists feeling, smelling and tasting. Those other senses such as feeling, smelling and tasting can be incorporated with multimedia applications by using haptic technologies.

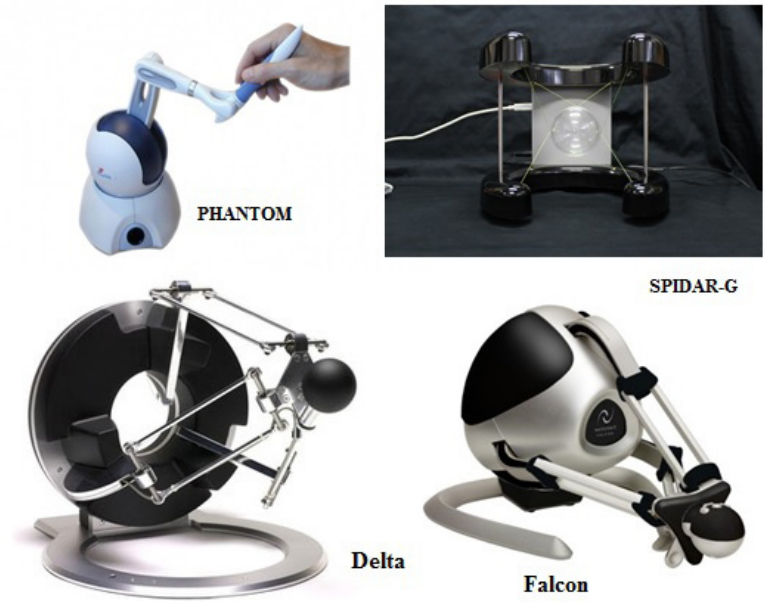

Figure 1: Haptic Interfaces

However, the incorporation of haptic technology into an image sequence, which is known as a video, is still in its infancy and it has gained a worldwide recognition among researchers. Therefore, we believe that user interactions with two-dimensional image sequences can be expanded to other perspectives in addition to the traditional perspectives of seeing and hearing due to the development and pervasive use of haptization systems. As Dinder et al. discuss, there are three types of haptic effects, which are cooperating with haptic interaction with video media (Dindar, Tekalp & Andbasdogan 2010). Those are haptic structure, haptic texture and haptic motion. Haptic structure refers to the touching or getting the feeling of the geometry of an object in the video scene. Haptic texture refers to the rendering of surface properties such that roughness of various objects in the video scene. Haptic motion refers to the rendering of forces related to the moving objects in the scene. In our research we are focusing on adding feeling into an image sequence such that we enable users to get the haptic perception of feeling the 6DOF motion of objects in an image sequence, with the objective of enhancing the viewing experience of viewers to the real world level.

When it comes to enriching video viewing experience, there exists few whole body sensation devices. For example, the wearable tactile jacket introduced by Lemmens et al provides tactile stimuli to the viewer's body (Lemmens et al. 2009). Apart from that, "Surround Haptic" is also a new tactile technology introduced by Israr et al (2012), which allows users to feel digital contents directly on their body, from all possible directions using a small number of vibratory actuators

(Israr 2011; Israr & Poupyrev 2011; Israr & Poupyrev 2011).However, despite their success in providing full body sensation, these devices limit users' interactions with the image sequence. For example, Lemmens's wearable jacket lets users only to passively feel the video and does not let the users to have a control on the feeling they get. Alternatively, there exist other haptic devices, which enable users to interact with objects in a virtual world by pointing the objects. These interactions involve users' hand and may involve various applications of object manipulation. PHANTOM, Falcon, Delta and SPIDAR-G are popular types of haptic interfaces, which are shown in Figure 1. Out of these four haptic devices, PHANTOM, Delta and SPIDAR-G are applicable for this particular work. However, due to the simplicity, familiarity, and the high quality of the feedback force generated, we use SPIDAR-G haptic interface in our research. The 6DOF capability of the SPIDAR-G device allows us to feel the 6DOF rotation and translation of objects in the image sequence.

Proposed Approach

The motions of the objects are not only translational but also rotational. In the real world, object motion exists not only in two dimensions but also in three dimensions. So that it would be interesting and highly necessary to research on how to incorporate three dimensional translational and rotational features as 3D technologies are becoming increasingly popular. Since SPIDAR-G haptic interface has the capability to generate six degrees of freedom force feedback, this could be implemented through SPIDAR-G. Hence, we propose a method to feel the 3D translational and rotational motion of an object in the 2D image sequence using the SPIDAR-G haptic interface.

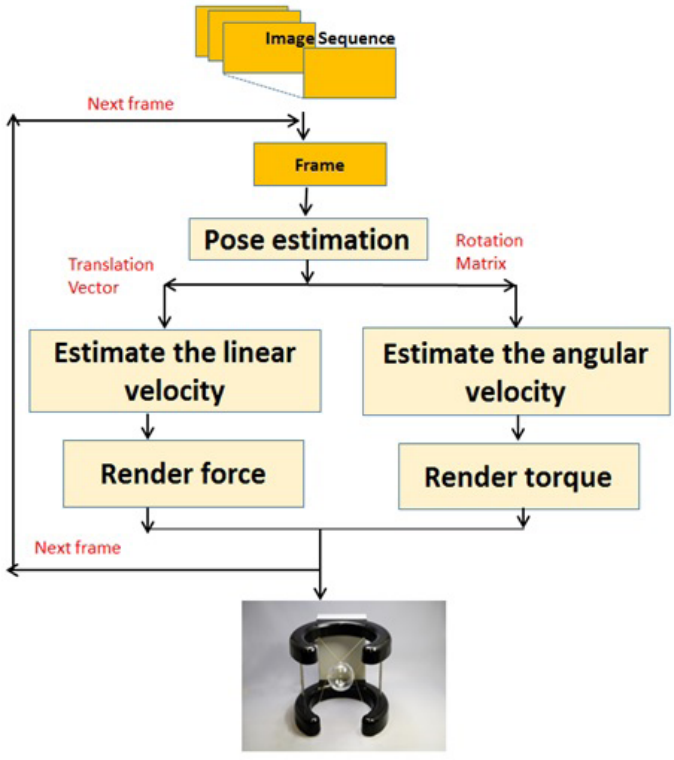

Figure 2: Proposed approach for 6DOF motion rendering

The proposed approach for this research is shown in Figure 2. At the first step, it estimates the 3D pose of the object in the image sequence by using an existing computer vision algorithm. As the next step, it estimates the linear and angular velocity of the object. In this research our main contribution is in the final step i.e. six degrees of freedom haptic motion rendering. For that, we propose two candidate methods namely linear gain controller method and a nonlinear gain controller method with the intention of selecting a better one. The following sections broadly describe the above parts.

Pose estimation

Identification of specific objects in an image and to determine each object's position and orientation relative to some coordinate system is a typical task in the field of computer vision (Pose). The combination of position and orientation is referred to as the pose of an object. The specific task of determining the pose of an object in an image or an image sequence is referred to as pose estimation. Different methods and algorithms are proposed for pose estimation in the field of computer vision. In our research to estimate the pose information from the 2D image points, we adopt the common and most popular computer vision algorithm called "POSIT". Pose from Orthography and Scaling with Iteration (POSIT) is a fast and accurate, iterative algorithm to find the pose of a 3D model or scene with respect to a camera given a set of 2D image and 3D object points correspondences (Martins & Batista, 2008).

The pose matrix **P** gives the rigid transformation between the model and the camera frame.

$$P = \begin{bmatrix} R \\ T \end{bmatrix} \quad (1)$$

$$R = \begin{pmatrix} r_{00} & r_{01} & r_{02} \\ r_{10} & r_{11} & r_{12} \\ r_{20} & r_{21} & r_{22} \end{pmatrix} \quad (2)$$

$$T = (T_x, T_y, T_z) \quad (3)$$

Where **R** is the rotation matrix representing the orientation of the camera frame with respect to the model frame and T is the translation vector from the camera centre to the model frame centre. Here, the rotation matrix R is a composite matrix, which represents the rotation around the x, y and z axis in sequence with respective rotation angles $\boldsymbol{\theta_x}, \boldsymbol{\theta_y}, \boldsymbol{\theta_z}$.
Thus the result of the total rotation matrix R is given by the product of the three matrices, $\boldsymbol{R_x}(\boldsymbol{\theta_x})$, $\boldsymbol{R_y}(\boldsymbol{\theta_y})$ and $\boldsymbol{R_z}(\boldsymbol{\theta_z})$, where,

$$R = R_z(\theta_z)\, R_y(\theta_y)\, R_x(\theta_x) \quad (4)$$

$$R = \begin{pmatrix} \cos\theta_z & \sin\theta_z & 0 \\ -\sin\theta_z & \cos\gamma\theta_z & 0 \\ 0 & 0 & 1 \end{pmatrix} \begin{pmatrix} \cos\theta_y & 0 & -\sin\theta_y \\ 0 & 1 & 0 \\ \sin\theta_y & 0 & \cos\theta_y \end{pmatrix} \begin{pmatrix} 1 & 0 & 0 \\ 0 & \cos\theta_x & \sin\theta_x \\ 0 & -\sin\theta_x & \cos\theta_x \end{pmatrix} \quad (5)$$

Hence we can estimate the rotation angles θ_x, θ_y, θz in the x, y and z axis as follows.

$$\theta_x = \tan^{-1}\left(-\frac{r_{21}}{r_{22}}\right) \quad (6)$$

$$\theta_y = \tan^{-1}\left(\frac{r_{20}}{r_{22}}\cos\theta_x\right) \quad (7)$$

$$\theta_y = \tan^{-1}\left(-\frac{r_{10}}{r_{00}}\right) \quad (8)$$

Estimation of the linear velocity and the angular velocity

Translation of the object in two subsequent frames at time t and (t+Δ$\boldsymbol{t}$) can be represented as $T_{(x,y,z)}(t)$and $T_{(x,y,z)}(t+\Delta t)$. Hence, the linear velocity $(V(t))$ of the object in the image sequence at time (t+Δ$\boldsymbol{t}$), is calculated using the equation (9).

$$\overrightarrow{V(t)} = {}^{\Delta T_{(x,y,z)}}\!/_{\Delta \boldsymbol{t}} \quad (9)$$

Where, $\Delta T_{(x,y,z)} = T_{(x,y,z)}(t+\Delta t) - T_{(x,y,z)}(t)$ (10)

Orientation of the object in two subsequent frames at time t and (t+Δ$\boldsymbol{t}$) can be represented as $\theta_{(x,y,z)}(t)$and $\theta_{(x,y,z)}(t+\Delta t)$. Hence, the angular velocity $(\omega(t))$ of the object in the image sequence at time (t+Δ$\boldsymbol{t}$), is calculated using the equation (11).

$$\overrightarrow{\omega(t)} = {}^{\Delta\theta_{(x,y,z)}}\!/_{\Delta \boldsymbol{t}} \quad (11)$$

Where, $\Delta\theta_{(x,y,z)} = \theta_{(x,y,z)}(t+\Delta t) - \theta_{(x,y,z)}(t)$ (12)

Haptic rendering of the force and torque

Haptic rendering means rendering of forces related to the moving objects in the scene. In this section we explain how we calculated forces and torques in 3D space based on the above linear velocity and the angular velocity in the image sequence. We used SPIDAR-G haptic device, which generates six degrees of freedom force feedback sensation to users by controlling the tension of each string in the device.

However, the high velocities produced by high force and low velocities produced by low force lead to an unrealistic sensation. To overcome this problem and to get a realistic force feedback sensation to the user we need to reduce force for high velocities and increase the force for low velocities. For this purpose, we proposed and evaluated two alternative methods: linear gain controller method and nonlinear gain controller method to identify which one performs better.

Linear gain controller method:

Automatic gain controller is a feature found on many electric circuits that automatically controls the gain of a signal. We used this concept to control the force of the haptic device.

Using the linear gain controller method, the feedback force related to the linear velocity and the angular velocity is calculated from equation (13) and equation (14). This enables user to get the feeling of the 3D movement of the object.

$$\overrightarrow{F(t)} = k_1 * \overrightarrow{V(t)} \qquad (13)$$

$$\overrightarrow{\tau(t)} = k_2 * \overrightarrow{\omega(t)} \qquad (14)$$

Here k is a gain controller. The purpose of the gain controller k1 and k2 is to increase the feedback force and torque for weak changes in velocity and decrease the feedback force and torque for strong changes in velocity.

$$k_1 = \frac{F\max}{V\max\,(T)} \qquad (15)$$

$$k_2 = \frac{\tau\max}{\tau\max\,(T)} \qquad (16)$$

Here F_{max} and τ_{max} are the maximum force and torque output level of the SPIDAR-G for better sensation for this application. $V_{max}(T)$ is the maximum linear velocity of the dynamic image sequence at a time T and the $\tau_{max}(T)$ is the maximum angular velocity of the dynamic image sequence at a time T, which can be expressed as in equation (17) and equation (18).

$$V_{max}(\mathrm{T}) = \{V_{max}(\mathrm{t}) \;\; 0 \le t \le T \qquad (17)$$

$$\tau_{max}(\mathrm{T}) = \{\tau_{max}(\mathrm{t}) \;\; 0 \le \mathrm{t} \le \mathrm{T} \qquad (18)$$

Nonlinear gain controller method:

In the nonlinear gain controller method, we use a nonlinear function to map the velocity into force. The resulting feedback force to sense the motion of objects is shown in equation (19) and equation (20).

$$\overrightarrow{F(t)} = f\ (\overrightarrow{V(t)}) \qquad (19)$$

$$\overrightarrow{\tau(t)} = \tau\,(\overrightarrow{\omega(t)}) \qquad (20)$$

In this case, the sigmoid function proved to be a good candidate for the nonlinear function f. However, as the velocity needs to be zero when changing the moving direction, we had to add an additional

requirement because the selected sigmoid function needs to go through the origin. Therefore, we selected the inverse tangent function to map the velocity into force, as shown by equation (21) and equation (22)

$$F(t) = \frac{2 \times F_{max}}{\pi} \tan^{-1}(\alpha \times V(t)) \qquad (21)$$

$$\tau(t) = \frac{2 \times \tau_{max}}{\pi} \tan^{-1}(\beta \times \omega(t)) \qquad (22)$$

Here F_{max} and τ_{max} are the maximum force and torque output level of the SPIDAR-G for better sensation for this application and α is chosen as 0.01 and β is chosen as 0.001.

Experimental Evaluation

Feeling of 6DOF motion means it enables the user to get the feeling of translation and rotation. Hence, we evaluate the proposed approach for 6DOF and test whether it enables the user to feel the motion of translation and rotation. We evaluate the performance with respect to the two proposed approaches: linear gain controller and nonlinear gain controller methods. We performed a qualitative experiment by getting the involvement of real users. All the participants were experienced users of the SPIDAR-G system. We used the image sequences of a rotating cube which has translation and rotation motion. At first, we let them to watch the original video. Then we let them to feel the motion of the image sequences using haptic device using the two methods i.e. linear gain controller method and the nonlinear gain controller method. At first we allow them to feel only the translation and rotation motion separately. Then we allow them to feel the translation and rotation motion simultaneously. In order to record the responses of users, we asked them to rate the two methods based on their feeling of the motion of objects in the image sequence on a scale of 1 to 4, which represents 'Very Bad', 'Bad', 'Good' and 'Very Good'. Based on the user responses we conclude that the users not only get the feeling of the translational motion, they get the feeling of the rotational motion too in the image sequence. Hence we can conclude that our proposed approach is suitable for 6DOF motion rendering.

Conclusion

In this research we discuss how to get the haptic perception of feeling the movement of objects in an image sequence, with the objective of enhancing the viewing experience of viewers to the near real world level. Hence, we propose a method to feel the 6DOF motion of objects. To achieve the above objective, we propose two methods for haptic motion rendering, i.e. linear gain controller method and a nonlinear gain controller method and we have experimentally evaluated and shows that the user able to feel the 6DOF motion from 2D image sequence from our proposed method.

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The Globalized Sari and its Sexual Appeal via Femininity

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Abstract

There is a relationship between dress and the female body. Women's clothes reveal body curves and provide sensual attraction. The level of cultural advancement or decline is directly tied to the level of regulation of female sexuality. Sexuality and clothes are always combined. However, different cultures have their own barriers regarding clothing and sexuality. The sari is the most sensual piece of draped garments in the world and it is revealing female curves seductively. It is traveling around the world and globalized align with the different cultural expectations. Through this research study, the researcher would be expected to discuss and constructively analyse sensuality of the sari and its parameters to identify the femininity qualities.

Keywords: Sari, Sexuality, Femininity, Globalization, Fashion

Introduction

The word sari comes from Sanskrit and means 'strip of cloth'. This was believed to be originated in India and later spread most of the south Asian countries. There are remarkable segments of the sari: the border, body or ground, outer end-piece, inner end-piece, selvedge, end fringe, parting-strip of warp without weft and sari fold. After mid of the 20th-century world, fashion has revolutionised because of globalization. Variations of western clothing have become the standard attire throughout much of Asian countries, even though women's lifestyles have dramatically changed. Women have a greater sense of their body and beauty in the late 20th century, and they dress to impress. Non-western dress in the global culture is progressively appropriated by western fashion. The sari travels the globe as 'fashion,' while it was once seen as 'traditional,' challenging jeans as part of the fashionable dress in many western wardrobes.

Aims and Objectives

- Discover the place where the sari globally has, and its sexual appeal
- Understand the feminine qualities of the Sari

Methodology

The methods of discovering data were based on grounded theory and the data gathering process was begun to discover raw data from journals and books. Those were used as secondary data and personal experiences, observations, visual and object analysis used as primary data. The inductive qualitative methodology has been used to analys the raw data. By accumulating multiple methods have been categorized raw data in most methodical and spatial manner. Initially, analysed the raw data and classified them to develop memos by considering the weight of the content of the gathered data. Ultimately, develop the conclusion by considering memos into constructive viewpoints.

Data Analysis

Women, dress, and femininity always change according to contemporary attitudes. Women should have the right to wear whatever they want, and this should apply to all women across the globe. Contemporary women are well educated and have responsibilities similar to men. The sari strategically meets the challenges faced by a modernizing culture. In South Asian countries, many middle-class women were increasingly turning to western styles of dress during the late 20th century, because they were easy to wear and took only a few minutes to put on, could purchase off the peg as compared to the sari drape. In the last decades of the 20th-century lifestyles became very busy as modern women took up a new role of a working woman who prepared meals and looked after children without compromising their personal life. Thus, balancing personal and career life style became hectic. Consequently, they go for anything that helps to simplify life and save time. However, some people feel that women in the public eye, such as broadcasters, teachers or politicians, have a responsibility to uphold their culture and wear the appropriate form of dress. There is also a fear that traditional styles of sari drapes could eventually disappear altogether with the increasing influence of western fashions. Thus, the sari needs to be modified as modern attire relevant to the lifestyle and the fashion preferences of mobile women.

Now the sari is promoted as suitable for modern women. It has become simplified because the western dress was the sign of modernization of non-traditional women. The sari represents the dignified beauty of women, and it epitomizes femininity, the mind of the wearer and sexuality. As a truly one-size-fits-all garment, the sari is an emblem of femininity. It holds all women equally, no matter the shape, size, height or colour. It makes all women beautiful. The feeling of the dress depends on the wearer's sense of the dress, and her awareness of its effect on others. Thus, it is crucial to compare one's feeling about one type of dress with another. The generational change in femininity is affected by contemporary dress codes. Contemporary women insist on seeing clothing as personal, an expression of a stable, unique identity.

Today, fashion is one hundred and eighty degrees from what it was 100 years ago: It is highly individualized, enormously affordable and basically for everyone. Fashion pervades every moment of life, and getting dressed becomes ever more creative and ever more fraught. Clothes make the woman, no doubt about it. The immediate attraction of a woman is not her resume, but what she is wearing.

The most influential and revolutionized fashion era in the world began after the second world war, and it gradually advanced. Women have come under the power of modernity and they have adapted to appreciate that modification. Thus, fashion was revolutionized, and women especially adopted most of the styles of world fashion. Looking at fashion in the urbanized sector, this is apparent. However, blindly copying the western way is shallow and self-degrading. Certain women who were born in South Asian countries and living in Britain have more concern for tradition than women living in South Asia. Older Asian women living in Britain wear the sari and modern mobile women were caught between clothing systems and confusing cultural demands. As a result, customized sari and hybrid attires of sari combined with western dress became apparent in fashion. The modifications of the sari have reflected this identity during the late 20th century. Further, global interest in Asian dress might open new democratic forms of cross-cultural exchange. Furthermore, the sari has been globalized and celebrated within and outside Asia. This globalization allowed for multidirectional cultural exchange. Additionally, the sari became combined with westernized clothes. There, the celebrities in western culture wear a strip of cloth with an elaborate design similar to the sari. They wrap it on their shoulder and it hangs down to their feet or, for some, down to their waist. This has been worn by many celebrities to parties or on the red carpet with sensual jackets and drapes. These inspirations revolutionized South Eastern sari drapes and some women wore sensual drapes of sari with modernized sari jackets

Fig. 01: The Ever Evolving Sari. (2011) Modern Drapes in Sari. [Online image]. Available at: < http://styleinsight.wordpress.com/2011/05/05/the-ever-evolving-indian-sari/> [Accessed 12 May 2012].

specifically during the late 20th century. Thus, most of the draping styles of saris become globalized.

In the 1980s and 1990s, fashion became eclectic. As an example, designer Jean Paul Gaultier created a collection influenced by subcultures.[1] He drew from the world of royalty in the Indian subcontinent. That influence was perfectly tuned to his signature-understated style, to the fluid sari style draped evening dresses. Non-western clothing took many forms in the 1990s. Versace was influenced by the sari and made a sensual collection for women that were sexy to the point of being offensive. His spring-summer evening wear collection in 1994 took the sari as its inspiration. In this instance of eastern dress meets western fashion, Versace translated the sari as a symbol and demonstrated its transfiguration and the resolve of the social and cultural convention behind it. Professional designers such as John Galliano, Alexander McQueen, and Armani use this 'six-yard wonder' as their inspiration.[2] The sari has crossed all borders and become a part of celebrities' wardrobes in Hollywood.

1. Non-Western Influence Relevant in Today's Fashion Scene. (2011) Jean Paul Gaultier S/S 2008 Collection for Hermes, Paris.

2. The Ever Evolving Indian Sari. (2011) Alexander McQueen F/W 2008 and Armani Couture 2007.

Fashion innovator Cristobal Balenciaga radically altered the fashionable silhouette of women in the mid-20th century. With the methodical skill of an expert tailor, he created garments of fluidity and grace. Unlike many couturiers, Balenciaga was able to drape, cut and fit his own muslin patterns, known as toils. He used knowledge gained from his journeys around the world and was inspired by the most feminine item in the Asian world, the sari. In the 1980s 'Madonna and Midriff' was very popular in shirts for teenagers, and this midriff influence came from the eastern dress. Mainly, the 'sari' drape influenced the bare midriff in western dress; after that short 'T'-shirts or torn 'T'-shirts, and hip-level jeans became very popular among New York dance students in the late 1970s.

The fashion always symbolizes the lifestyle of a particular time, it is a unique and highly creative generator of culture, and the creation of costumes or clothing is the attribution of symbolic values of the material culture (Hardill & Villett 2010). This is implemented from the perspective of every culture and can be recognized by 'fashion styles.' Clothing is about the 'social construction of identity,' and the economic, class and consumer implications of the late 20th century have continued into the 21st century. Thus, it is clear that changing styles of clothing fashion communicate cultural values of a country from one period to another period. In most regions of the world, the stunning and earthly wrapped garment is still worn. However, the sari began to become globalized late 20th century and it rapidly elevated its' recognition as the most feminine draped attire of women.

There is a relationship between dress and the female body. Women's clothes reveal body curves and provide sensual attraction. The level of cultural advancement or decline is directly tied to the level of regulation of female sexuality. Sexuality and clothes are always combined. However, different cultures have their own barriers regarding clothing and sexuality. Western culture gives more

freedom to reveal the body than most cultures. Sri Lankan culture is completely different. Western fashion designers have the freedom to express their philosophies through their inventions. Covering or adorning the body is shaped by culture. With its changing styles and constant innovation fashion always reinvents the body, finding new ways to conceal and reveal body parts and make the body visible and interesting to look at.

The clothes are the main factors that arouse sexuality by conveying the human figure dramatically and erotically (Wickramasinghe 1935). He argued that nakedness is not the main sexual influence, echoing psychoanalyst Fugel's argument that nudity is not the only factor that arouses sexuality. As an example, the sari is very seductive when combined with sensual drapes. Draping is the most ancient and extensive form of clothing, and the method of draping can produce seductive silhouettes. However, the cloth covers the body; it gives a hidden sensual attraction through the silhouette. Thus, the silhouette or the shape of the dress is the main attraction. To develop a sensual silhouette the fabric, pattern construction methodology, stitching, colour, and composition are the prime factors. Nevertheless, as Wolf notes: "The dress for women is comparatively a simple matter, having only two functions additional to covering the body – those of creating beauty for the eye and attracting the admiration of the male sex" (Wolf 1992: 179). Beauty and sexual attraction always function together. However, beauty always depends on the interpretation of the viewer. Thus, it is clear that truth, like beauty, is only in the eye of the beholder. The beauty of the female is represented in her appearance. Kaiser argued that appearance is "The total composite image created by the human body and any modifications, embellishments, or coverings of the body that are visually perceived; a visual context that includes clothing, as well as the body" (Kaiser 1997: 4). According to this argument appearance, is mainly based on clothing.

The female body and erogenous zones engage with dress or cloths. Erogenous zones arouse sexual curiosity and draw attention to the whole female body; this varies from culture to culture and over time. Fashion reflects behaviour as well as aesthetics. The change of culture, living circumstances, the influence of western ideas and consumer fashion encompass more than dress and body feminism. Asian men pride the nape of the neck, while Europeans are unique in their fixation on the waist. Societies alter erogenous zones to make them more 'beautiful' or prominent. Sexuality and clothes are always combined, but different cultures have their own barriers to clothing and sexuality. The sari is conventional attire due to social and cultural transformations; they became sexier attire during the latter part of the 20th century. The sari has an enduring magnetism, given thatthey are not cut or customized for a specific size. This poised feminine attire can be worn in numerous ways to convey sex appeal, and the wearing approach and shade and feel are symptomatic of the status, age, profession, constituency and faith of women during the century.

When considering the sari drapes of contemporary fashion, there were influential connections between sensual women's body curves and femininity. The sari was increasingly popular and continues to be so. The flow conferred to the natural contours of the female form enhances the gracefulness of women as no other apparel can. Ethnic costumes are an integral part of the tradition. The sari remains the conventional clothing of South Asian women. The latest sari styles range from having a high neck to a plunging low cut. However, every style has its own identity. The sari is more sensual with a properly fitted jacket, revealing part of the breast and midriff significantly in any style of drape. The breast and midriff are the main erogenous zones. The jacket with bareback bodice and deep neckline in front gives maximum beauty and glorifies curves. It is seldom discourteous, and both attires fit any size or figure shape. Feelings about dress depend on the wearer's sense and the viewer's point of view. So it is critical to compare one's feeling about the dress with others. Dharmapala stated that the sari was the most suitable attire for Sri Lankan women; the morally acceptable dress covered the entire body with a proper blouse and a cloth ten riyans long(Wickramasinghe 2003).

In the psychology of clothes, psychoanalyst Flugel (1950) observed that bare flesh is boring. Male curiosity is sustained by veiling the erotic site, by covering and exhibiting it at the same time. Most contemporary fashion reveals female body parts directly. Both attires cover the body but reveal its curves through the drape. According to Flugel's theory, the bare body or body parts of women do not give more sensations to men. Thus, this counters the patriotic mindset regarding westernized clothes in postcolonial Sri Lanka. Further, women's dress mainly serves to attract men, and to do so emphasizes erogenous zones. Male sexual curiosity is, however, highly unstable. The change of fashion and its dictates are directly related to shifting erogenous zones.

Further, modern sari lengths became shorter than the traditional five to six yards due to ergonomic factors in the office and household working areas. Another question concerns the 'proper blouse' and 'cover the breast, stomach and back completely,' according to Dharmapala's view. Considering contemporary fashion and attitudes it was a matter for conflict in the latter part of the 20th century because many women have adopted the 'sari' as worn with a sexy and short blouse. The mini sari style of draping was the most in demand among upper-class women during the mid of the 20th century.

At the beginning of the 21st century, most women wore sensual sari drapes that differed according to the fashion trends. Fashion is always changing and women consumers are urged to adopt those styles. Art historian Holander (1975), as cited by Svendsen, explained that fashion consists of the attractive clothes styles at any given time, and perception is the main factor in fashion (Svendsen 2006). Thus, women were able to observe the latest fashion and tended to experiment with it. It is not logical to argue that modern mobile women in the South Asian region should not adopt the latest fashion because of cultural barriers. On the other hand, everything can be changed but everything is not fashion (ibid).

Therefore, when observing fashion it is necessary to be conscious of the style suited to the wearer. Otherwise, fashion can destroy personal identity. Some commentators, notably Novalis (1999) as cited by Svendsen (2006), have stated that fashion is a true improvement in human life. [03] Thus it is evident that people who select fashion that is suitable for them and constantly adapt to the latest fashion are more alive than people who do not pursue fashion. It is clear that clothes have a sexual appeal. However, different cultures have different social norms regarding this. On the other hand, fashion continuously stresses the erogenous zones of women. Therefore, cultural norms and the latest fashion oscillate via femininity.

03. Svendsen, L. (2006) Fashion: A Philosophy.

Conclusion

The sari is a miracle garment, suitable for women with different body shapes due to its magical draping quality. Fashioning the female body and its femininity shaped by culture. With its changing styles and constant innovation fashion always reinvents the body, finding new ways to conceal and reveal body parts and make the body visible and interesting to look at. Thus, the way of the drape of the sari always calls someones' attitude, culture and the level of ego.

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Consummate inspiration of an institutional knowledge ecology vis-à-vis on knowledge management

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Abstract

Archetype of knowledge management is a remarkably intricate commitment and a route at the phenomenon of knowledge competitive advantage. Knowledge assets both implicit and explicit devote knowledge economy towards to complexity with high moral values of knowledge holders. Deviation of knowledge assets and its holders create knowledge conflicts whilst excessively influence for knowledge management and its components. As a results, knowledge management successive movements and its knowledge ecology attributes assist to promote knowledge harvesting in various perspectives. So, this research has been done based on case study methodology to find critically the mean of knowledge ecology and how its attributes influence to the knowledge competitive advantage. Also, knowledge management model in knowledge ecology preview was developed and tested, therefore, the research find in the voyage of knowledge ecology contributes enormously to perform knowledge management well with organization's ecology attributes/assets. As a result, organizational knowledge ecology attributes/assets such as human, resources, knowledge, environments and technology very much significant to work harmony alike ecology at the present knowledge economy.

Keywords:

Knowledge Management, Knowledge Ecology, Knowledge Economy, Knowledge Sharing, Knowledge Assets, Knowledge Harvesting, Competitive Advantage

Introduction

The characteristics of knowledge have been described by Blackler (1995), as disorganized and difficult to manage, multi-faceted and complex, being situated and abstract, implicit and explicit, distributed and individual, physical and mental, developmental and static, verbal and encoded. Nonaka (1994) viewed knowledge as an individual or collective. An individual knowledge exists in the heads of individuals, while collective knowledge exists in the collective actions of the groups and organizations. Therefore, it can be realized that if knowledge is not effectively capitalize organizational earning and growth will be a problem. Because, it is very significantly indicates that nowadays with knowledge competitive advantage and its continuous development shake the whole knowledge management process of organization towards to tremendous changes and challenges. To face competitor's challenges and to cope with realistic changes in the knowledge

economy is not an easy task and process. However, it evidenced that many organizations have to gain knowledge about knowledge ecology to understand knowledge and its competitors at the knowledge asymmetry setting. At the same time, managing of organizational knowledge is an important but not only with the support of Information systems (IS) and/or technology devices. Reasons to claimed that because in the recent past many scholars have urged that the importance and close relationship in between knowledge management and other disciplines including medical science and aero engineering with knowledge management advancements. Also, it has seen that knowledge management (KM) and related strategic movements are essential for organizations to survive and to maintain their competitive advantages.

Therefore, the purpose of this paper is to insight the significant contribution of organizational knowledge ecology to knowledge mining, harvesting and auditing. And also to show the critical connection of knowledge ecology to knowledge management processes. For that purpose, the term information ecology has used to develop a model because in the literature the word ecology uses as a metaphor, but do not provide a framework for research. Therefore, in this paper, the researcher extends the ecological concepts to knowledge management and developed specific propositions for further research.

Knowledge Management and its origin

Stimulating society with competitive knowledge advantage turns that the knowledge consumption is a significant factor to knowledge management. Knowledge can be basically grouped as implicit knowledge and explicit knowledge. The implicit knowledge is a concept akin to the notion of “unconscious competence” that sits in people’s heads therefore Halles (2001) argues that the implicit knowledge incorporates in processes, products, services, structures, methods and techniques. It also includes traditional values and beliefs so that all members of a society have embedded the tacit knowledge where they live. As a result, the implicit knowledge evolves with history and tradition due to this phenomenon, as Quintas and Ray (2002) point out, implicit knowledge cannot be codified or make explicit. Adding to the scholars’ point of views that, Awad and Ghaziri (2004) study reveals that the proportion of un-captured the tacit knowledge is up to 95% and only 5% of the explicit knowledge. Therefore, Horvath (2003) emphasizes that, ‘knows’ remains ‘unknown’ or ‘inaccessible’ because the tacit knowledge tends to mirror the way work actually gets done within an organization and not necessarily mandated in procedures and processes. In contrast, explicit knowledge as Halles (2001) explains have structured therefore knowledge is systematically documented, but can be distinguished. However, it does not necessarily reflect synonymous with “know-how”.

In the process, the tacit and the explicit knowledge interact with the knowledge wisdom to create a new form of knowledge purely with wisdom. Albert Einstein highlighted the term wisdom as "not a product of schooling, but of the lifelong attempt to acquire it." Therefore, knowledge wisdom plays a vital role in the process of knowledge creation, sharing and management. And also significantly, there is no wisdom then new knowledge does not create as a result, no values are adding to existing knowledge. Simultaneously, knowledge management can become a complex task and also perimeter. So, what knowledge management is Alavi and Leidner (2001) define as "a systemic and organizationally specified process for acquiring, organizing, and communicating both tacit and the explicit knowledge of employees, so that other employees may make use of it to be more effective and productive in their work". In contrast, O'Dell et al., (1998) describe it as "a conscious strategy of getting the right knowledge to the right people at the right time and helping people share and put information into action ways in which to strive and improve organizational performance". Further, Beckman (1999) defines knowledge management as "the formalization of and access to experience, knowledge and expertise that create new capabilities, enable superior performance, encourage innovation and enhance customer value". However, from the knowledge ecology perspective, Malhotra (2000) describes knowledge management as "cater to the critical issues of organizational adaptation, survival, and competence in face of increasingly discontinuous environmental change. Thus, essentially, it embodies organizational processes that seek synergistic combination of data and information processing capacity of information technologies and the creative and innovative capacity of human beings".

As above definitions illustrate, knowledge management is a set of things involved in various activities. Therefore, it is evidence that knowledge management includes theories, models, processes and technologies to support protect, develop and exploit knowledge assets. Therefore, managing of intellectual capitals that exist in both implicit and explicit forms of knowledge enhance an organization's ability to learn from its environment and also incorporate its knowledge into business processes. Further, it creates new values for the organization to improve its efficiency, effectiveness and competitiveness. As a result, Davenport and Prusak (2000) urge that knowledge is a fluid mix of framed experience, values, contextual information, expert insight and grounded intuition that provides an environment and framework for evaluating and incorporating new experiences and information. Therefore, it is significantly originating in the mind of knowledge holder and can be able to initially apply by the knower. Therefore, practically, it often becomes surrounded not only in documents and repositories but also in organizational routines, processes, practices and experiences. So, Grey (1999) highlights that processes in knowledge management are involved in to identify critical information, sharing information, protecting and enhancing the value of information, and leveraging knowledge utility in major organizational decisions.

Core relationship between knowledge management and knowledge ecology

The philosophy of ecology shows how to cope with humans, knowledge, resources, environment and technology to perform specific tasks when knowledge management is concerned. To maximize the knowledge management initiatives, the key factors such as relations, procedures, rules, mechanisms, concepts etc., have to be interrelated, and, if not, those knowledge tasks cannot be performed individually and achieved goals of knowledge management. Therefore, the overall ecological balance of knowledge highly effects the value orientation of knowledge, and as a result, ecology evolves with the knowledge management

Further, it can be stated that, knowledge management is the management of organizational knowledge for creating business value and generating a competitive advantage. As a result, it enables to create, communicate, and apply the knowledge to achieve business goals of the organization. In this regard, to achieve business goals in an organization is one of the most important tasks in the knowledge ecology of the organization. In general, the term ecology uses in Science to analyze the relationship between members or species of a community and their interaction with the environment. Therefore, Hannan and Freeman (1977) initially emphasis the importance of the knowledge ecology as an organization and its effort to create and harvest new knowledge. In contrast, as an organizational species, Liang and Chan (2003); Bownder and Miyake (2000) compare as organizational values for knowledge creation, growth, dissemination, transfer and selection of under structural sequences, employment interaction and external relationships within the surrounding of the organization.

Therefore, it indicates that knowledge ecology is a metaphor, a perspective, a design approach, an emergent paradigm and a field of study that recognizes the importance of relationships, the diversity of knowledge forms and types, and centrality of community when working with knowledge. It is ecological in the sense that the best models assist to create, sustain, and foster the growth of knowledge of organizations and such organizations become learning organizations. As a result, Por (2000) defines knowledge ecology as “a field of theory and practice that focuses on discovering of better social, organizational, behavioral, and technical conditions for knowledge creation and utilization”. Further, the Community Intelligence Lab (2000) describes the metaphor in ecology illustrating how knowledge exchanges, innovation blossoms, values add to information, and new knowledge tests and applies through accrue expertise and learn within the ecology. Therefore, the knowledge ecology, in particular, does not claim to institutionalize new ideas nor knowledge itself be managed. So, the ecological framework is expanded into a wide range of disciplines such as Organizational Learning (Senge 1997), Intellectual Capital (Sveiby 1997), Information Ecology (Davenport and Prusak 1997) and Communities of Practice (Brown 1999; Wenger and Snyder 2000).

Further, Bownder and Miyake (2000) explain the positive involvement of knowledge ecology with knowledge management

in three basic concepts/theories. They are: evolutionary theory of technology; knowledge base technology of firms; and eco-system theory. The evolutionary theory of technology states that organizations either have to accumulate experiences with advanced products and technology or perish due to lack of organizational adaptation. The second theory which is knowledge based technology of firms means that eco-system of knowledge agent/industry forces to compete with other knowledge agents and knowledge species of the organization/ community. The importance of this theory is that knowledge ecology of the organization has to compete with competitors to cope with interaction. And, the last theory that on eco-system combines organizational ecology and information ecology. It indicates that knowledge ecology of the organization means that variety of knowledge assets of the entire organization/industry. As a result Liang and Chen (2003) illustrate four areas in knowledge ecology to highlight the core relationship of knowledge diversities, because it presumes that diverse knowledge stabilizes organizational performance. The identified four areas are key knowledge, co-evolution, ecological niche and organizational knowledge. Key knowledge is the main species of the organization which essential for organization to survive in the knowledge economy/ knowledge industry. The second and the third areas state that co-evolution and ecological niche proliferate interaction with the knowledge to enforce knowledge creation and performance. These processors are very much similar to food-web that different species in eco-system plays their roles as producers, consumers, or decomposes. The final area which is organizational knowledge discusses the influences on its functions and interactions with knowledge networks. Here, the segments in knowledge ecology as Chen (2010) studies can contribute to distribution, interaction, competition, and evolution to maintain knowledge balance.

In the process of knowledge management, actions are taken to separate properties of ecology is very difficult, because most of the components in knowledge management evolve together to create, manipulate and transfer knowledge. Therefore, any organization including both knowledge management and its knowledge ecology, are significant when the knowledge assets are concern, because those interact with each other continuously. Organizations as knowledge agents have to consider the importance of knowledge distribution, in order to distribute knowledge effectively and efficiently. If the organization's knowledge ecology is contributed negatively to knowledge distribution then knowledge products may face negative impacts since the success or the failure of the knowledge management depends on knowledge ecology of the organization. The knowledge distributions, however, is a challenge because choosing and configuring of knowledge are not simple tasks due to knowledge intensity and knowledge diversity. Knowledge intensity is relatively strength in particular knowledge population and, therefore, has more competitive advantages than their competitors. For example, university library/academic library has more potentials because, library becomes automatically knowledge auditor/knowledge harvester of its knowledge ecology/knowledge communities.

it is evident that library has much potentials to maintain links, directly and indirectly, with knowledge customers and consumers beyond its limitations. Therefore, university library is one of the comprehensive place where knowledge ecology functions gigantically within the university eco-system. Offering Services from the library like “Ask Reference Librarian” thrives its ecology. In contrast, knowledge diversity reflects the equitable measure of the species in the knowledge community. Their knowledge is assorted unlike in knowledge intensity situations because they have more potential to configure diverse knowledge to compete with competitors. For instance, unrestricted services and resources of university library can be taken out because an individual efforts to obtain those personally may be costly and also enforce restrictions. Therefore, situation occurs in a similar conditions, it is very significant to mention that it does not create the environment to distribute intensity as well as diversity knowledge. Because, organization is wish to transfer the knowledge, but its knowledge assets/agents are protect/conserve their implicit knowledge without sharing. Therefore, the component of knowledge distribution is very vital in the knowledge competitive advantage society. However, it does not make any sense until species of the knowledge ecology interacts with one another to create and transfer of knowledge, because positive interactions are important to knowledge distribution.

As a result, knowledge creation and knowledge distribution become complex and more clutter due to competitive scenarios of knowledge assets/agents, knowledge eco-systems, robust technology, and resources. And, competitions among these attributes may occur either in collaborative or conflict manner. The competitive approach happens in collaborative manner its more into democratic approaches because of that resources as well as values are sharing with all the inhabitants enthusiastically. However, the opposite side of it, competition leads to direct confrontation for common resources or values between communities that become competition towards to conflict approach. For an example: competition in between Wikipedia, “the free encyclopedia that anyone can edit” and Google Knol, “share what you know and write a Knol.” At the exterior it is very difficult to understand there is a huge competition between two portals of knowledge sharing, but once involve proactively with the knowledge sharing process it explicates less into democratic approach. Therefore, it is very much important to maintain/control the knowledge ecology of the organization to occur the conflict competitive approach, because it increases the fear while decreasing the mutual understanding among the knowledge assets/agents.

It reflects very clearly that any organizations involve/face with knowledge competitions then it would be better to have a system/ mechanism to cope with its knowledge evolution. Knowledge evolution is a tactics that on pressure of environmental variability that is dynamic due to strive to integrate, build and re-configure competences with changing environments. Therefore, to build a positive knowledge evolution, knowledge mutation and knowledge crossover can take into consider. Knowledge mutation is derived from genetic mutation, which stands for the random change of the

occurrence of a particular gene in a species. Genetic mutation can be recognized as an internal force to change the inhabitants. For an example; information politics and information culture of an organization is a best example in knowledge mutation. In contrast, knowledge crossover is also gene and one of the most important facts for genetic variation. Gene crossover is the interchange of sections among pairing homologous chromosomes during the prophase of meiosis. As a result, in the knowledge ecology, knowledge crossover can identify as changes or enhancements of knowledge due to a threat/force from outsider of the knowledge assets/agents. Such a knowledge assets/agents can be acquiring of a patent license holder and/or hiring a new researcher from a competitive organization.

As a result of these metaphors in knowledge ecology, Mallawaarachchi and Xiangxian (2011) urge that to investigate the complex relationships among individuals, inhabitants, and the entire eco-system including its organisms because they are very much important to the knowledge competitive advantage society. Therefore, it can be seen that intellectuals from many fields are keen in to carryout research in knowledge management as well as in knowledge ecology because new approaches in knowledge management is directly associated with its diversity. Knowledge diversity synergies increasing diversity as well as decreasing diversity in the present scenario of knowledge competitive advantage. Therefore, Shrivastava (2000) urges that the concept of knowledge ecology is one of a useful frameworks to utilize to understand relationships between knowledge, ecology and its practices positively and interactively. So, Holland (1998) studies the knowledge ecology indicates ways in which to cope with competitive knowledge advantage while understanding its complexity, adaptation, emergence, self-organization, openness, and decentralization. So, knowledge ecology constructs and emerges multiple knowledge networks assets, because it houses the learning occurs in a bottom-up and emergent manner, rather than top-down and hierarchical structures. So, when knowledge ecology functions smoothly knowledge boundaries are difficult to determine because knowledge decentralize and ubiquitous are in the nature.

Conclusion

Knowledge ecology represents a fundamental shift in current thinking, moving away from traditional knowledge management which focuses on “bottom line” challenges of assessing, organizing, leveraging and receiving profit from knowledge towards to knowledge competitive atmosphere to use the synergy between technology and human intellect and innovation. It further has explored an ecological view of knowledge management with attributes of human, knowledge, resources, environment and technology. These attributes provide a creative dynamic view for knowledge management and a new direction for investigating knowledge management. Since the ecological view of knowledge management is still in its early stage, most of the concepts proposed here do not have strong empirical support therefore more empirical studies would be needed to evaluate the model and to provide insights in the future when knowledge management is concerned.

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Challenges of Industrial Drum Production in Sri Lanka[1]

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Abstract

In 2013, I visited a drum maker who is living in the outskirts of Kandy, where he put up a workstation of Sri Lankan traditional drums. There, he produces mainly getabera, yak bera, dawla, and raban on demand of some government schools, private dance schools and individual professionals of Sri Lankan traditional music and dance. I had an opportunity to videotape the entire process of the drum production and interviewed the drum maker mainly asking questions on the economic, social and aesthetic matters pertinent to his profession. In the year 2014, a project that was funded by the World Bank has attempted to make this production more effective, and to increase the number of drums in a short time using new techniques and machines, so that Sri Lankan traditional drums can be easily promoted throughout the world market. These drum makers living near Kandy were provided new machines, and were trained by professionals to use these machines. One of these professionals has informed me that this process first went well during the initial time period that the project has been running. However, after one year, he found that the drum makers have given up using new machines and new techniques, but they have returned back to their usual way of drum production.
This paper unfolds the reasons for giving up modifications of drum productions and subsequently discusses how far drum production can be modified. It also explore some contradictions between marketing leaders and aesthetic preferences of drum producers and musicians. By doing so, this paper will provides some new insights on traditional preferences and modern marketing strategies.

Keywords: tradition, standardize, craftsmanship, getabera, thammattama, dawla, world market.

01. A great part of the content of this article was already published in the book series of ICTM Study Group Musical Instruments (2017) under the title "The Story of a Failed Business Concept: Intensifying a Drum Production in Sri Lanka" [SIMP V (New Series), 323-350.].

Introduction

Literature and orally transmitted information make evident that the drumming tradition of Sri Lanka is closely related to the ritual practices of Buddhism, Hinduism, and non-religious belief systems of various social groups in Sri Lanka (Suraweera 2009; Rajapakse 2002a). The type of religious and secular practice as traditional performance (drumming, singing, and dancing) is categorized by the name of the region to which the respective tradition belongs to(Rajapakse 2002b). Accordingly, there are a number of craftsmen producing Sri Lankan traditional drums distributed in the main regions that are still historically valued, namely up-country, low-country, and Sabaragamuwa. These craftsmen are trained at home, inheriting the knowledge and social position through elder members of the family, mostly passed down orally from father to son. Drums are made

according the requirements demanded by the buyer. Traditional performers are particularly concerned with the sound quality of the drum rather than its physical appearance. The production of the drum, from cutting the tree to the final stages, is taken quite seriously. However, according to a number of craftsmen, some practices of crafting that previous generations found important are now being ignored, modified, or changed (Abhayasundara 2004).[2] After "traditional dance" was incorporated as an aesthetic subject in schools and universities, traditional performers found that these drums were often not made up to the standard that they once were. Looking into many drawbacks of drum makers, some funding organizations have attempted to improve crafting techniques according to the worldviews of neoliberal craftsmen. This study tries to document and discuss how innovations and modifications on traditional drums were understood by project consultants and how they are received by traditional craftsmen and performers.

02. Also I have conducted interviews with Richard Nikapitiya (14 10 2017 in Maharagama) and DhammikaChaminda (27 March 2017 at UVPA), Lasantha Kumara Edirisinghe (27 March 2017 at UVPA).

Traditional drums that are often used for rituals and Buddhist ceremonies are the following:

- getaberaya (associated with Up-country)
- devolberaya (associated with Low-country)
- dawla (associated with Sabaragamuwa region)
- thammattama (used in all regions)

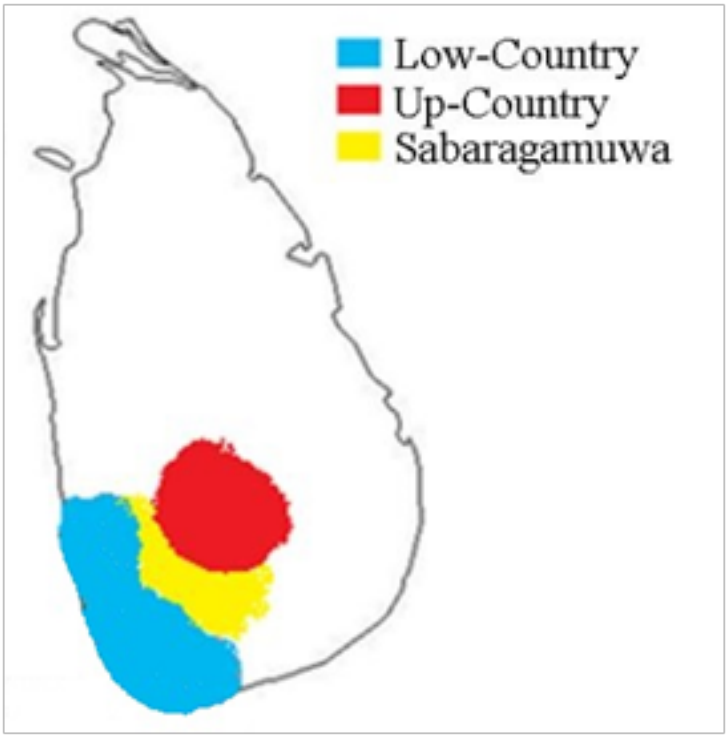

Fig. 1: The map shows three different regions (Low-country, Sabaragamuwa, and Up-country) in Sri Lanka, each with associated common-practice traditional drumming, singing, and dance styles (Suraweera 2009). Scheme extracted by the author.

I visited drum workshops in two villages in February 2013 and January 2017. Performers, craftsmen, and project members were interviewed. In 2013, I visited a craftsman, Kalaugalapathane Ranathunga, whose workshop was in Manikhinna, Kandy. To get an introduction to his knowledge, I recorded him making a getabera[3] in his traditional way. There are few substantial writings on Sri Lankan drum traditions related to specific people and places (Larsen 2009, Simpson 1997, Jones 2008). However, this paper provides firsthand information that might shed new light on previous findings on similar topics. In particular, this study highlights the variety in Sri Lankan drum making, which was previously documented based on preconceived and homogeneous notions of practices.

03. The word bera stands for barrel shaped drums in general.

Fig. 2: Kalaugalapathane Ranathunga is producing a Kandyan drum in his workshop in Manikhinna, Kandy. Photo by Gisa Jähnichen.

Price, Time, and Efforts

Ranathunga inherited the tradition of drum making from his father and dates back to his grandfather's time. He and his relatives produce few varieties of *bera* (drums) to earn money to cover daily expenses of his family. Ranathunga revealed that he started drum making when he was nine years old, and despite him claiming to be 53, he is said to have been active in the profession for forty years. To take up the family business, he gave up school at a young age. Despite being a maker, he never learned to play traditional drums. He willingly introduced me to two family members who demonstrated the drums for me in his residence. While I visited Ranathunga, his son helped in the work by moving the iron wheel tool for a couple of hours for his father. After working for a few hours on one getabera , Ranathunga said: "It takes at least three days to complete a drum. There are good techniques using machines, but we don't get enough profit to buy and maintain machines. I sell a general bera for seven thousand rupees and a good bera for fifteen thousand. It takes nearly one day to hollow out the wood. If it is the part of the core of the tree, then it takes at least two days.

Such wood is used for expensive drums. We cannot see such expensive drums in instrument shops. Performers personally come to us and request us to produce such drums in a good quality, then only we start making them" (ARCPA 02106 & 02122)[4]

According to Ranathunga, he is an expert in making the traditional drums of all three regions. He describes the standard dimensions of gerabera should be between 34 to 36 inches long, with the diameter of the drum heads ranging from 7 to 7.25 inches. He notes that the diameter of the drum heads should be slightly different, at least by a quarter inch (ARCPA 02119). In addition to Sri Lankan traditional drums, Ranatunga also produces congas, tambourine, bongos, and other varieties of which he is rather careless with dimensions or notions of an authentic sound quality. These drums are often sold to people who occasionally practice popular music in casual entertainment settings.

His brother in law demonstrated drum patterns and techniques for the getabera, explaining for which occasions and purposes they are played. He highlighted the spiritual and royal importance of getaberaya[5] which is played when the flag is raised on Independence Day, when it needs to invite gods to auspicious occasions, when the sacred tooth of Buddha is moved in the temple of tooth relic in Kandy, and in the practices of *kavi, bana*, and *bali thovil* (ARCPA 02131, 02132, 02133 & 02134).

In January 2017, I returned to further explore on traditional drum production in Sri Lanka and to compare traces of this production on the internet. I found a few funding organizations who ran projects looking to work with craftsmen modernize crafting through the use of machines and new techniques to not only save time, but to also make products more attractive with modifications. I contacted the leading people of one organization who has conducted workshops and seminars on the use of such efficient crafting techniques. This project was run by the government through a group called the "National Design Center of Sri Lanka." The main objective of the project was "developing local drums, consisted with modernized appearance and turn them into highly marketable products in the modern music instrument market" (mentioned in the website of the project). I spoke often with the project's resource consultant, Richard Nikapitya. His proposed designs include attractive drums (appendix) that are standardized so that if some parts of the drums wears out, the user can replace only those parts instead of replacing the entire drum. Mr. Nikapitya's project also equips craftsmen with tools and machines, at no cost. Thus, they can both standardize their practice but also apply traditional knowledge through the time spent in workshops.

04. ARCPA is an abbreviation for "Audiovisual Research Collection of Performing Arts". This Audio Visual Archive exists in the Music Department, Putra University, Malaysia. The given code is unique to a deposited audiovisual recording which is accessible to the public.

05. Also known as magulberaya.

Fig. 3: One of the drum workshops in Kuragala village, Kandy, before starting the project. Photo by Richard Nikapitiya, July, 2013.

Among all the staff who conducted the project, Nikapitiya seems to be the most familiar staff member with music. In general, music is his hobby and passion and he explores music by himself and through socializing with experts in performing arts and musicology. He is quite interested in sound acoustics and music management in addition to his main expertise on 3-D animation audio technology, computer science, and product design. After teaching efficient crafting techniques and marketing strategies to the craftsmen recurrently for one year at Kuragala, he recently learned that his efforts on improving the craftsmanship were not appreciated. He says “then later, nearly after two years, I visited them and found that they have returned back to the previous working styles and techniques. I came to know that the person who has pawned the equipment was the best skilled in the group. He did it to buy alcohol. Most of the people do not have the equipment anymore and the improved set of skills are not continued.” This was his first expression on the project outcomes when I initiated the conversation with him.

According to the information provided by Nikapitiya and Vijitha, there were previous projects funded by a few other institutions such as the National Craft Council and Central Province Department of Industrial Development & Enterprise Promotion, which have not been successful as expected.

Fig. 4: The picture taken on 16 July, 2013, gives a rough idea about the space, people, and multimedia facilities in seminars c onducted by Nikapitiya (left) and Vijitha (right).Photo courtesy of Richard Nikapitiya and the author.

On 30th January 2017, we, myself with Nikapitiya and Vijitha, visited the trained craftsmen at Kuragala village to observe the outcomes. We had many interesting discussions with the craftsmen and people of the village. Also, we found out what they have absorbed from the entire course of the project. One of the craftsmen described the improvement in crafting and what they had to let go. However, after visiting the village along with Nikapitiya, we saw that the progress was not so bad as described prior to the visit.

As we arrived in the village, we met Silva[6] who was noticeably more talkative than the others we later met in the village. Not having enough space to work in his own house, he works at friends' homes in the village. According to Nikapitiya, Silva has actively attended the seminars and workshops of the project and learned new crafting techniques and realized to some extent which attitudes of traditional craftsmen have to be changed. Silva's opinion is that even as attitudes are changed, the instruments cannot be produced accordingly for some reasons which will further be revealed in this article.

06. He was not willing to spell the full name.

Silva seems rather disappointed that he is unable to proceed with his intended modifications in productions and promotions. He says, "We try to do many new things, some are successful and some are left out because what we expect to do is quite expensive and hard work. First, we have to fulfill our daily expenses by continuing usual productions because only a few are here economically fit." He further elaborated that he would like to reside in a constructed village where he would have less conservative neighbors of younger generations. He wishes, if the government would arrange new housing possibilities, at least for ten young families at an isolated location and keep the work running just to avoid influences of those conservative people, he would be glad. He prefers young craftsmen, who have gained individual skills, which may collectively contribute for a better production. He believes that the project of the National Design Center has improved skills of craftsmen to make the productions more up to the desired standard. They previously made drums aiming at immediate money, means the drums were not attractive as they were not even polished well.

Silva is very thankful to the National Design Center for arranging workshops and giving opportunities to learn efficient methods to enhance the quality of the drums. He also says he and his colleagues have known how to make drums attractive even before, but they did not think it was necessary, thus they did not try. Nowadays, the majority of customers have gotten used to demand drums with a well finished look. What he means by well finished is that not only the outer appearance but also the neatness of the inside of the drum as well. He admitted that they had never thought of a neatly finished inside.

Fig. 5: Thammattama in an exhibition. Photo by Richard Nikapitiya.

Silva was proud to tell about some incidences where some regular customers who wanted to get their drums repaired have said "the inside of the drum is done so well and we are so fortunate to meet an honest and skillful craftsman like you." Seemingly, these craftsmen are currently rather encouraged as they are invited by the Education Department for providing and repairing drums for schools. Meaning, they could overcome the negative reputation of the "Kuragala craftsmen."

Crafting Tools, Material, and Techniques

In 2013, at the drum workshop in Manikhina, found that Mr. Kalugalapathane Ranathunga did not use electric tools and some material in comparison to what the Kuragala craftsmen use today. The consultant Vijitha asked Silva what tools have been newly introduced by the project and he asked him to tell me more about them in detail. Silva continued "A lot of tools were provided by the project. We actually have known to use the compressor to polish the wood even before. After 2013, we learnt to use electric machines for cutting and engraving the drums without using human power any longer. The water-based method is quite costly, therefore we use it

for the purpose of displaying drums in exhibitions and on requests. Unfortunately, we could not follow many new things taught during the workshop, for example using NC (thinner) which no one could learn here yet. During the workshop, we could make best quality drums applying new techniques and material because we were well guided. We sold these products in the exhibition for big money, for example we could sell a thammattama (kettle drum) for 15000 LKR, which is a very high price that we could have never imagined." Silva proudly said that he sold a few best quality drums at high prices for the Sri Lankan customers living in America and France.

Fig. 6: Some examples for modified drums (getabera and dawla) made by Kuragala craftsmen are displayed in the exhibition. Photo by Richard Nikapitiya.

Aesthetic Issues

The design consultant of the project, Mr. Nikapitiya introduced the craftsmen to an artificial hide that can be used for the drum head as an initial step to make all the getabera with similar sound in performances. The conflicting opinions and suggestions of the craftsmen, project consultants, and performers can help to find out what really could be changed in the getabera. Before visiting the craftsmen in Kuragala, I managed to meet Nikapitiya and to discuss a newly introduced hide for the drum heads and its efficiency. I delivered my question to him "There must be traditional shapes of drums and techniques of crafting which were learned from the craftsmen's forefathers. So, have you ever had an impression that the craftmen were a bit reluctant to do modifications as they get concerns on the look and the sound of the drums?" His answer shows his many ideas about drum traditions. He said "You know that a bera is a very noisy musical instrument. it is a tribal musical instrument. If you play 50 drums you will hear fifty different sounds. If you record them, then again, the sounds are changed. If you hear recorded sound from different speakers, then again, the sound is different. If you look at wave forms you will see the difference. This is even common for many other instruments for example you can identify your guitar sound from others. I have observed the natural hide of these drums. I looked at them more than 100 times using a microscope and I have witnessed how bacteria destroy the drum hide step by step."

I met a professional drum player Lasantha Kumara Edirisinghe who also works as an accompanist with traditional drums at the University of Visual and Performing Arts, Colombo. He appreciates that the sound of each getabera can be different and finds that the different sounds of drums are useful in group performances. He says “On the one hand I don’t think authentic sounds can be produced with an artificial hide which will be a limit in tuning as well. Too much of perfection is not suitable. I like the changing sound in my instrument. If you use animal hide then the sound will be changed according to the weather, night, morning, and so on. If you play ten traditional drums you can hear ten different sounds which is fantastic. Even if we use an artificial hide, we cannot make all the sound as the same, because each musician has his own weight in their strokes.” He further explained that the morning dew makes the getabera sounds more pleasant as the drum skins can change according to the time of the day.

Another professional performer is Mr. Dhammika Chaminda. He is also an instructor at the University of Visual and Performing Arts, Colombo. He insisted “you cannot produce the same sound on an artificial hide.” He also prefers the sound to be different on each drum in a group drum performance. He says “the stroke should not be changed for example when all performers play the sound ‘jing,’ then there should be different sound qualities within this jing sound yet it should not sound like other strokes. You know, each drum is made according to the physical dimensions of each musician. My drum length is three *wiyath*, three *angul.* A wiyath is a length from thumb to the little finger, as the fingers are spread, and angul is the length from the first joint above the palm to the end of the index finger.” He said that tuning units that are proposed to fix on getabera is not applicable as the performers cannot adjust the tuning while performance is carried on. The tuning is not meant to be fixed throughout the performance and drum players like the tonal changes in drums and tuning them while performances are going on, are cultured as indispensable parts of performance.

Silva’s experience reveals some problems in using the artificial hide. He believes that the sound of artificial hides is not that much different from the natural ones. However, he prefers not to use artificial for traditional drums. In his point of view, he finds the use of artificial hides as dangerous for traditional drums like getabera and dawla. He uses artificial hide for non-Sri Lankan drums like congas and dholak. While he could not express clearly why he chooses not to use artificial hides for traditional drums, he did mention that the use of hydrogen peroxide makes them more stretchable. This procedure leaves the hides much whiter than the natural ones making them more contrasting with an unusual look. He is also not that keen to fix nuts and bolts that were introduced as a tool on the traditional drums to make the tuning more efficient. He said “for that we have to spend a bit more money but we sell it for a big money. We do that on request only,” which he says is exceptional and professional traditional drum players do not prefer such modifications.

After talking to Silva, I met Wimalasiri who is rather conventional. He inherited drum craftsmanship from his father. He is firmly against

modification which he thinks as harmful to the authenticity of traditional drums. He informed me that his father was the first person who came to his village and started making tabla. Then later the other people started making traditional bera and so on. He inherited the secret of preparing the paste patch for the tabla. As he is the only person who can make it, he says that he would not let anyone else in the village to know the secret. However, he claims that he makes all types of drums which are used in Sri Lanka. His straightforward answer on using artificial hide was “not possible! We have already compromised with goat hide as it is difficult to find monkey hide.” He confirmed his opinion by saying that the technology is developed in India more than in Sri Lanka, but India still could not replace the natural hide used for the tabla heads with any other material.

However, he had never experimented with artificial hides as he finds it as inauthentic even it may make the sound uniform. He says “I don’t think the artists will use it because, according to the tradition, we use only cow, monkey, and goat hides. Without such hides, there will not be a value in the drum. It will not be good to replace skin straps with nylon ropes as warapati.[7] Perhaps we can cheat a child with this but not the traditional artists. Traditional artists want it original.”

07. The straps that connect the two drumheads along the drum.

As a matter of fact, the traditional drummers in Sri Lanka are mostly Buddhists. Traditional rituals where the traditional drums are involved are directly or somehow connected to Buddhist, Hindu, and indigenous beliefs. The performers who are involved in these practices are mostly able to justify obligatory undertakings for the tradition that are considered taboo in the respective belief systems. For example, slaughtering a chicken for a deity as an exchange to cure the illness of the sufferer. Using animal hide for traditional drums is a usual practice which is not taboo in rituals and other religious ceremonies. Wimalasiri is not at all used to modifications like artificial drum heads. He was rather against the advice given through the project. He says “for the getabera we use cow skin for the drum head on the left side of the getabera and also for the patiya (belt) and kanwara (the woven loop that attaches the waist strap to the drum). For the right side (louder side), there must be goat skin. It will be much better if you can get a monkey skin[8] to the right. But who will kill a monkey for that purpose? Of course there are people who kill monkeys to eat the meat. Some farmers kill monkeys to protect the crops. We cannot get a skin unless someone kills because, we are Buddhists.” In order to use the monkey hide, the monkey has to be killed without damaging the important part of the skin. He described “the sound of monkey skin is not replaceable with any other skin. Always the skin should be cut at the back but not through the belly. Backside skin is as hard as cow skin but the belly skin is soft. We do not search for monkey skin, but if anyone wants monkey skin to his bera, then he has to find it himself, we only do the craftsman’s part.”

08. Grey Languor monkeys that exist in Sri Lanka.

Lasantha Kumara Edirisinghe says “I don’t want someone to kill an animal to get a hide to make my drum. If the animal was killed for eating by somebody else, then the hide can be used without me feeling guilty. I like to use animal hide instead of artificial stuff.”

Mr. Dhammika Chaminda is not only an expert in drum playing he has also gained knowledge in drum making through self-conducted experiments. He firmly admits that the monkey hide is the finest for the right-side drum head without any compromise. He says, "I have already experimented this by doing it. You cannot stick the artificial hide on the Gatiya (the woven ring around the edge of the drumhead). Furthermore, I tried to make the body of the drum with fiber material, and it became too light and easy to carry while playing, but it is not practical as we hit fast and the drum tends to shake so easily making it very uncomfortable for us. Therefore, using wood is the best." Some craftsmen try to use the color of the actual tree by using artificial colors, to cheat on us and that is not good. We can identify good wood. Some make straps (warapati) out of the deer hide to attract us. But this is not as strong as cow hide for straps. Monkey hide is the best for the right drum head. Goat hide is a bit harsh, rough. Some craftsmen use rilawa (rhesusmonkey) hide but it is too oily and not nice." He informed me that the dimensions of the drum are decided according to the performer's hands who plays it. The dimensions of the longer drums (i.e., yak beraya and gaṭaberaya) were traditionally measured at three wiyath[9] and three angul in length, and one wiyath at the diameter of the drumhead.

09. A Wiyat is the length from the thumb to the little finger as the fingers are spread.

Tradition versus Modernity

The people I met during the field studies of this research have conflicting and similar opinions on the industrialization process of traditional drums. However, four different groups can be identified according to their opinions, problems, aesthetic preferences, and commitments that they bear. They are performers, craftsmen, spectators, and design consultants with project objectives. The latter are committed to improving a drum production in Sri Lanka by convincing the craftsmen of adapting new methods and material so that the drums can be standardized.[10] The objectives set by the project authorities demand these products to be bought by foreign visitors and these products to be exported to the world market which may bring economic wealth to the country.

10. Attracted by appearance and long lasting material.

Drum performers expressed that traditional musicians prefer the look and sound of their non-modified drums. Silva said, "there are some conventional musicians who still like crooked, roughly finished drums and also who will buy them for hundreds and thousands of rupees if the drum sounds good." Silva is quite critical about the traditional way of life as he sees in Sri Lankan drummers in general. He finds that the young generation of drummers just follow their fathers by imitating the appearance and the behavior for example the young drummers wear sarong[11] and chew betel as their fathers did, therefore he finds that their attitudes are not up to date. He says "They learn from fathers by just following without questioning, they believe their feet should touch the earth and then only they are connected to gods. When they get into a public bus, people maintain sort of distance from them because they are not attractive as they eat betel and wearing in indecent way and the way they carry the drum is messy as the drum is rapped with a red cloth." Silva is rather disappointed that some modifications are not accepted by the drummers. He suggested that the drum should

11. Sinhala traditional dress wore around the waist by men. It is made in tube shape.

be gracefully polished and kept in an elegant casing like western music instruments' casings, and then the traditional drummer has to give up betel chewing and wearing traditional dress for casual occasions, they have to get used to decent clothing which may bring traditional drummer into higher status in the society.[12] Overcoming the societal disregard. Silva was dared to reveal some tricks that they do to satisfy the traditional drummers who are particular about keeping to the rules in shaping the drum. For example, using kurahan[13] gala[14] which has been an essential tool in shaping the drum edges (See figure 6). The musicians expect that craftsmen indeed use kurahan gala to make the drum appropriate with the tradition. Silva says he does not need kurahan gala for that anymore as they have new tools which are much better for that purpose. He had to pretend that he uses it and therefore he was clever to keep a kurahan gala at working place pretending as if he uses it.

Fig. 6: The kurahan gala is displayed at one of the drum workshops in Kuragala village. Photo by Chinthaka P. Meddegoda.

The influence of the project objectives is quite visible in the views of some craftsmen like Silva. Nevertheless, some adaptations are visible in all the craftsmen's workshops. All the craftsmen in the village have replaced the manual wheel to the electric motor. Some craftsmen say after they start using the electric motor, for example, the time they spent for 20 beras is now spent to produce 50 beras.[15] The surface of the wooden body of the drums was cut and polished much better than before as craftsmen were trained and introduced to efficient working tools and materials by the design consultants of the project.

As Nikapitiya informed me, the project funding ended in 2014, and therefore they could not follow up the craftsmen for further years caring whether the craftsmen continue what they learned and accordingly to support by providing new knowledge and funds. Nikapitiya's opinion on development of traditional drums represent the industrial point of view while he is very much aware what he means and his thoughts are utterly straightforward. According to him craftsmen must have a goal to become successful entrepreneurs

12. In contrast to the picture of Indian caste painted by Dumontian scholars, in which the emphasis is on purity and pollution, the Sinhalese caste system is rooted in a feudal system of service tenures to the king (Rajakariya). Historically, therefore, the status of being low-caste (adukulaya) in Sinhalese society is primarily connected to the idea of service and land tenure, with notions of impurity forming a secondary theme. Simpson, Bob (1997). Possession, Dispossession and the Social Distribution of Knowledge among Sri Lankan Ritual Specialists.The Journal of the Royal Anthropological Institute, 3 (1), 44.

13. The word stands for Finger Millet grains and the word gala stands for stone. Kurahan gala is the mill which is used for grinding finger millet.

14. Kurahan gala is a manual mill made of stone. It is used in Sri Lanka for grinding grains.

15. The craftsmen feel somehow exploited and are not happy with the mediators who find customers to sell the drums.A few craftsmen informed "there is a summit here who does the mediator role. They buy a bera from us for 6500 LKR and they sell it for 8000 LKR. We are losing 1500 unnecessarily".

by selling improved productions to the masses for higher price without concerning the social and cultural connections that are attached with the conventional drums, performers, and spectators. According to the information provided by craftsmen, they have indeed learned new crafting techniques and material that can make the conventional drum more attractive to the world. The summary of the conversations with craftsmen reveal that although they are willing to change, the conventional performer will not accept the change. If the craftsmen do not facilitate the objectives of industrial projects, they will not receive the financial support and new knowledge. Seemingly, the craftsmen have been able to manage the needs of the both parties by accepting some modifications which do not affect the sound of the drum and its conventional look.

If the drums have to be produced in mass, there will be difficulties like finding the right wood demanded according to the oral tradition. The professional performers who are coming from traditional schools are particular about choosing the right wood which are processed with rituals as described in static anthropological literature as Suraweera has pointed out.[16]

Suggestions

Silva seems to be rather matured in age though he suggests that he would like to work with young craftsmen who are not following conventional patterns of opinions and crafting methods. His suggestion for developing drums is that the government has to arrange an isolated location for him surrounded by young craftsmen with special crafting skills with innovative mind set. The other craftsman who represents "the traditional drum maker" is not willing to accept contrasting modifications such as replacing animal hide with artificial leather and fixing new units on the drum for tuning purposes. He predicts that the traditional drummers will not accept modifications. However, it seems to be that these craftsmen are not confident to face the consequences such as losing customers by changing the condition of traditional drums.

Nikapitiya's opinion contrasts with the conventional craftsman though Silva could be convinced for the suggested changes. Nikapitiya says "The first thing is, they do not have a target. They do crafting just to live. A country can be developed by doing industries but not by doing a job to cover up daily expenses, just like going to office every day and getting a monthly salary. Their ultimate goal was to become an owner of a pattala.[17] These craftsmen can test the right sound using many types of leathers thousands of times, they will not lose the drum unlike someone who tries different intonations through the throat doing small surgeries. There will be many people to criticize if you try new things. You have to ignore them and just go on, if you consider what they say, you will never reach the target."

Vijitha, the manager of the project, says "these people tell big stories about making drums, they have not yet done such work and presented. We say you have to do something, then only we can improve through the mistakes. They will get more support from many other sources after they get attention by doing something impressive."

16. "… a tree suitable for drum making, namely that trees grown near temples, waterfalls or trees brought down by natural causes such as lightening were preferred. Trees near cemeteries were considered particularly unsuitable. Once a suitable tree was chosen, the earth under the tree was cleaned, and offerings were made to the Gods to seek their permission. Verses and prayers were recited for up to seven days prior to the felling of the tree and carried out at a particular auspicious time according to astrology. During the construction of the instrument and after the body of the instrument was carved out, it was kept under flowing water for around seven days. It was then taken out to be dried in the shade. A paste of heated resin was coated on the inside of the drum, with the belief that this would protect the instrument from undesired, external, malevolent influences usually reserved for humans" Suraweera, Sumuditha (2009). Sri Lankan, Low Country, Ritual Drumming: The Raigama Tradition. PHD Thesis submitted to the University of Canterbury.

17. This is a manual set up with a big iron wheel which is used to shape the drum.

Conclusion

Improved technology has not only to meet willingness to adapt to improved production skills, but also social needs within the communities. It can be observed that some activities where the traditional drums are involved have been changed or modified according to the factors like economy, modernity, politics, and globalization. Some activities are not frequently functioning anymore as they were in the past.[18] The traditional drums were utilized for some popular music and video productions though they were not originated or made for them. However, it is important to look at why these drums were not asked for modifications or improvements even though the functions are changed in some instances.

This is because, the appearance and the sound of the traditional drum is valued or ridiculed or used as just a sound in modern popular events to showcase the traditional performing arts as a part of the concepts despite the fact that it is fusion or any other form of popular performing item. This research can also confirm the assertion of Margaret Kartomi that "musical instruments are fixed, static objects that cannot grow or adapt in themselves" (Kartomi 2001). In fact, all the major undertakings regarding Sri Lankan traditional drums being observed in different places of Sri Lanka cause changes, from cutting a tree to make a drum to a performing event. While performing, the musician has to take chances in applying or doing modifications on the traditional drums if they encounter the necessity. This is much different from the case of the harmonium or the tabla in the Malay world where the performers have not got any opportunity for changes in the structure of the instruments although their playing techniques and functions are rather different from the functions in the originating cultures of those instruments (Meddegoda & Jähnichen 2016). The playing techniques, performance sequences and the condition of the instrument are strongly bound and depend on each other. Therefore it can be asserted that the performer has to encounter the need for modification in their instrument rather than the craftsmen or other observers like funding organizations who do not experience the actual condition nor the musical necessity.

Nevertheless, the process of drum production is rather changed as some examples show clearly the gap between static ethnography provided in some literature (Kariyawasam 1998) and the dynamics of current cultural and social life in Sri Lankan communities for example visible in the process of choosing the wood and making the drum edges using kurahan gala.[19] The growing demand of the traditional drums from schools, universities and private performing arts institutions has increased the number of production of drums and therefore it has become impossible to choose wood and execute other undertakings according to the recommendations set by the tradition. These alterations are disregarded to some extent by the traditional performer as they are not primarily influencing the appearance and the authenticity of sound of the drum although there may be some scientific facts which can really matter (Larsen 2009).

18. Suraweera mentions that "In the periods of this study, I have noted a number of occasions where my informant had to omit the performance aspects of the ritual. Secondly, even though the performance element are still present in the public rituals, these rituals are being adapted to contemporary society with a focus on entertainment". Suraweera, Sumuditha (2009). Sri Lankan, Low Country, Ritual Drumming: The Raigama Tradition. PHD Thesis submitted to the University of Canterbury, 255.

19. Figure 6.

Refusing technological changes by the craftsmen and performers may not just indicate unwillingness but may have well considered reasons that cannot always be expressed. However, some expressions as illustrated in this paper can detect and predict some reasons for unwillingness for change. Therefore, parallel to the implementation of technological and industrial approach on traditional music instruments, cultural anthropology should have gone along to understand the possibilities and the limitations. Therefore, there is a strong need for specialists in the humanities that can analyze complex cultural patterns. However, an approach as suggested by Barth (2002) and Hannerz (1992) and analyzed by Eriksen (2007) for the understanding of knowledge distribution and application has yet to be found for a culturally flexible embedded knowledge reception and critical appropriation as a counteraction to adopt global values for the sake of local sustainability.

A further discussion of more examples and an intense discourse with social anthropology can improve the way how social needs and musical creativity can be academically supported thus contributing to different local life qualities.

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Dhammika Chaminda (27 March 2017) Interview about playing techniques and drum production. University of Visual and Performing Arts, Colombo.

Silva, E. U. P. (29 January 2017) Interview about getabera playing techniques and drum production. Kuragala Village.

Wimalasiri (29 January 2017) Interview about traditional drum production. Kuragala Village.

Vijitha (29 January 2017) Interview about drum production in Kuragala. Kuragala Village.

Lasantha Kumara Edirisinghe (27 March 2017) Interview on Getabera playing techniques and artiste's preferences in drumming acoustics. University of Visual and Performing Arts, Colombo.

Audiovisual Material

Ranathunga Kalaugalapathane (02 October 2013) Interviewed by Chinthaka P. Meddegoda on drum production in Manikhinna village. ARCPA 02119, Manikhinna, Kandy.

All other cited audiovisual material is publicly accessible on site at the Audiovisual Research Collection for the Performing Arts at Universiti Putra Malaysia, Music Department (ARCPA).

Appendix

Photos provided by Richard Nikapitiya (numbered according to exhibits).

Fractured Realities: Identity as Construct in Michael Ondaatje's Written History as explored in his seminal text, Running in the Family

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Abstract

Migrant writers such as Michael Ondaatje often face the difficult situation of carving out an identity for themselves based on their lived experiences. Such writers are those who move from one nation to another for various reasons. Due to this shift in geographical location and the change of 'home', these writers often find themselves in a state of constant struggle with a duality of personality. This is mostly due to the fact that they feel a sense of belonging as well as non-belonging to multiple nations and multiple cultures. They cannot claim ownership to the nation they left behind while at the same time, they also cannot claim any possession in their adopted country because of their ancestry. This in turn causes a sense of confusion and disorientation which most writers attempt to unravel in their writing.

Michael Ondaatje is considered one of the premier Sri Lankan writers, writing in English. His famous text Running in the Family is a collection of narrative, poetry and photography detailing the life and times of the Ondaatje family.

What is evident through his writing however, is that more than a mere presentation of the exploits of the Ondaatje family, Running in the Family becomes Ondaatje's personal journey through which he attempts to build an identity for himself. For this purpose, writing down his version of the history of his family becomes a carefully orchestrated construction of his own sense of self. Through the various incidents revealed in the narrative, it becomes apparent that through selective description and participation, Ondaatje tries to mitigate the loss caused by migration through his writing. Thereby it is evident that, many writers who go back or look back thus, are doing so with an intensely personal motivation. In turn, this commonly causes their version of history to be different to another's.

Key Words: Migrant Writers, Michael Ondaatje, Running in the Family, Sri Lankan Writers, Identity

The migrant experience is nothing new to Sri Lankan writer Michael Ondaatje, who was born in Sri Lanka but grew up for the most part, in Canada. It is thus safe to assume that Ondaatje would have experienced the fractured reality that is a common lived experience of migrants, who find their sense of belonging torn between two nations. It would be correct to assume that many migrants like Ondaatje, experience confusion and doubt concerning who they are and where they belong simply because of the duality of their lives and the cultures they belong to. Many writers attempt to unravel this confusion by means of re-writing their own histories. One of his most famous works of semi-fiction/history, is the text Running in the Family which is his version of the history of his family as it played out in Sri Lanka before his eventual departure. In Running in the Family, Ondaatje looks at the unique position afforded to the Burgher community in Sri Lanka and how his family navigated the intricate politics of the time to leave their own indelible mark on the landscape of their nation, a nation that Ondaatje ultimately left behind. In doing so, Ondaatje attempts to piece together his own identity, carving for himself, a place in the history of his people.

Chelva Kanaganayagam, in his article 'A trick with glass: Michael Ondaatje's South Asian Connection', states that "To be refused a role in history is to be denied the very basis of identity. Hence the writers need to establish a niche for himself in Sri Lanka" (Kanaganayagam 1992: 34). This statement foregrounds the argument in this article that Ondaatje writes more to create an identity for himself rather than to put down a genealogy of sorts through his book. In this context, it is important to analyse what identity means, especially for the migrant writer. Salman Rushdie posits, in his book Imaginary Homelands, that as migrants "our identity is at once plural and partial. Sometimes we feel that we straddle two cultures; at other times, we fall between two stools" (Rushdie 1992: 15). At the heart of this definition is a sense of confusion and disorientation on the part of the migrant about his/her identity. It also hints at the fact that the migrant writer is not wholly in control over his/her own individuality.

A sense of belonging evades the migrant due to the fact that they are physically distant from their heritage while also not completely a part of the society in which they live, because of their ancestry. Rushdie goes further to state about his novel Midnight's Children that "what I was actually doing was a novel of memory and about memory, so that my India was just that: 'my' India, a version and no more than one version of all the hundreds of millions of possible versions" (Rushdie 1992: 10).In a way, this is what all migrant writers do when they write about the country they left. They re-claim their nation and identity by re-imagining their homelands.

In light of this, it is crucial to understand that the version of history that Ondaatje chooses to put down on paper may well not be the history that others living during that time experienced. Kanaganayagam, in his article, discusses how Ondaatje's text remains wholly free of any mention of the civil war that gripped the nation for more than thirty years, despite the fact that he would have been in the midst of it before his departure. Similarly, Kanaganayam also points out that

Ondaatje's allusions to the JVP uprising are also negligible and do not in any way reflect the sentiments and experiences of the people living in Sri Lanka during that time. In fact, Ondaatje merely glances by these momentous events in Sri Lankan history, presumably because they do not inform his perception of 'his' history or of 'his' identity.

In Running in the Family, Ondaatje relates how the rebels came to his father's estate in Kegalle and while scouring the area for arms and ammunition, laid their plans aside for an afternoon to play cricket on the lawn. The violence and heightened political anxiety of the time does not enter into this narrative and the text remains free of that mien of darkness. Kanaganayagam, refutes this method of narrative as he believes that "the author's intention was to distance himself from ideological issues that he did not feel strongly about" (Kanaganayagam 1992: 36). Unfortunately, in doing so, Ondaatje ascribes to a certain sense of solipsism that denies his right to assert a strong sense of ethnically Sri Lankan self and identity. Kanaganayagam sees this as the biggest failing of his and most other Sri Lankan writers of English; that they "for the most part, (have) stayed clear of the upheavals that have transformed a kindly, generous nation into a cruel and mindless battlefield" (Kanaganayagam 1992: 41).

While this method of narration may be true to the writer's sense of self, unfortunately, it gives rise to the sentiment that Derick Ariyam in his article 'Imagining Sri Lanka: Expatriated Versions of the Nation', puts forward as being held by many local readers. He states that "being between-worlds—and not wholly part of either—the expatriate's expressions of their homeland are often charged as inauthentic" (Ariyam 2010: 1). What is problematic with this statement however, is that in the writer's mind, there is nothing inauthentic about his version of events.

The catastrophic political events that took place in Sri Lanka are not given prominence in Ondaatje's narration simply because they do not influence his idea of his identity. In other words, they have had no place in the formation of his personality as a migrant writer, or at least we can assume that he believes it to be so. While it is also true that no artist can produce work in a vacuum and that all expressions of the aesthetic, whether in music, art, dance or literature is influenced by the artist's interactions with the outside world, each artist reserves the right to decide and highlight the specific influences that he/she believes informed his/her identity. By this reasoning, Ondaatje's refusal to engage with Sri Lankan politics can be read as simply his way of stating that these events have had only marginal impact on the formation of his identity as a migrant writer.

Ultimately, most writers discover that they recover both closeness as well as a certain level of distance when writing about either locale that constitute the basis of their identity. While the closeness provides a sense of belonging and roots, the distance helps to put the facets of information into greater perspective. In other words, Ondaatje would not have been able to describe the exploits of his ancestors in this very manner had he not achieved a sense of distance from them by moving to another country. In this respect Rushdie states that "it may be argued that the past is a country from which we have all emigrated,

that its loss is part of our common humanity" (Rushdie 1992: 12).

This statement points to the fact that Ondaatje's at times dispassionate description of the events surrounding his family, are thus freely given due to his detachment from his own past that is deeply rooted in his country of origin. By these means alone, he is able to construct an identity that is fragmented; containing elements of history that he alone chooses to embrace. This is a luxury not afforded to people who lay claim to only one homeland and one history. Others do not achieve the kind of distance he does by virtue of their placement within their own histories.

What can be taken as conclusion here is that the migrant is one who deals with multiple cultures and lives in two worlds simultaneously. In turn, this duality informs much of their own awareness of their identity. It is an identity forged through confusion and disjointedness; the direct result of migration and residual feelings of loss. On the bright side however, such individuals, evidently achieve a certain sense of distance from the multiple locations to which they are connected but have no inherent allegiance to. As Ondaatje's Running in the Family portrays, such distance allows the writer to construct and formulate his identity by means of appropriating history in a way that he sees as befitting.

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An investigation of the appearance of Surrealism in 20th Century Sri Lankan Paintings

(With reference to an analysis of the paintings of L.T.P Manjusri)

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An attempt at identifying the psyche through Surrealist paintings

Introduction

This article will focus on the psychological background of Surrealism and the way the artist's dream contents and other unconscious elements have inspired and contributed to their paintings. The article also explores the tenants of Surrealism to a greater degree thus paving the way for an understanding of the elements of this movement that is apparent in the works of Manjusri and other contemporary and modern Sri Lankan painters.

Dream content and its interpretation

Research has shown that dreams can be related to the dreamer's waking day concerns which can provide insight into the dreamer's thoughts, feelings and experiences. They are directly related to the dreamer's psychological wellbeing in such a way that the people who are suffering certain psychopathologies dream differently from those people who do not suffer from them (Dell'Aversano 2008). Thus dreams can be a valuable tool to reveal important aspects of the dreamer's physical, mental and emotional life. In his monumental work, *The Interpretation of Dreams* (1899), Sigmund Freud states that the content of the unconscious is the psychologically significant source of the dream in the material world, and the events that comprise everyday existence. The mysterious activities of the unconscious and the repository of latent desires, tensions and unresolved problems recoil on the dreamer as he/she sleeps (Freud 2006). He states confidently that through the implementation of his psychological techniques, "Every dream will reveal itself as a psychic structure, full of significance, and on that may be assigned a specific place in psychological activities of the waking state."

However, it is important to keep in mind the pivotal fact that unlike Freud (or any other dream theorists), the Surrealists did not seek to find a "Cure" or to curb the activities of the unconscious. According to their doctrine, this was virtually impossible. Their task was rather to look into the materials of the unconscious in order to unlock the secrets of the material world, viewing the unconscious and its workings as representing the interface between the authentic metaphysical

grounds of materiality and human waking existence. The Surrealists believed that ultimate reality resided behind the facade of outward appearance and had immediate links to a person's dreams. For them the dream contained meaningful symbolic representations, and its analogical method of communicating knowledge through association is best expressed via an aesthetic mode such as painting (Harmon 2001:106).

01.Harmon, M. (2001).The Mad, Magnificent, Salvadore Dali. Biography, 5(1), 106

Dreams and surrealism have one common element. That is the unconscious (Rebate 2002). Unconscious desires, self-destruction, and despair and the dark impulses that people suppress during their waking hours, have long been an inspiration for painters and writers. Surrealism sought communication with the irrational and the illogical, deliberately disorienting and reorienting the conscious, by means of the unconscious. Dreams provided a continuous, symbolic commentary on the internal psychological (and sometimes physical) functions. Whenever language failed to convey a particular inner experience, dream imagery could capture it vividly and authentically. Long before Freud, dreams were lauded as sources of knowledge, providing information about the dreamer's present situation and future prospects. Dreams never quite belonged to their dreamers, since the hidden meaning was not immediately accessible. One needed the help of a competent interpreter or prior training in the art of deciphering. Only then would the dream yield its secret message (Gibson 1987: 56).

02. Rabate,J.(2002) Loving Freud Madly: Surrealism between hysterical and paranoid modernism. Journal of Modern Literature, 25(3/4) 58-74

03.Gibson,J.(1987). Surrealism before Freud : Dynamic Psychiatry's 'Simple recording instrument'. Art Journal,46(1) 56

The Surrealists provide the best example. They were a group of writers and artists who, for the most part, were keen readers of Freud and who had paid careful attention to his theory of dreams. They knew about the sexual drives, about oedipal desires and the castration complex. Although figures like André Breton changed their views about Freud at different moments of their careers, art historians explain how Surrealism and Psychoanalysis went hand in hand. Yet how exactly did Freud's dream theory inspire the surrealists? The unconscious desires Freud brought to light are, in fact, no more present in Surrealism than in any other art movement. But what are apparent are the mechanisms of the dream work, the ways desire slips through the nets of censorship. When a desire cannot be represented consciously, Freud showed, it will take on the form of some absurdity. Two objects that could never be juxtaposed in reality become so in the dream such as an artichoke and a human head, a fish and a bicycle. They are condensed into one, as a way of disguising desire. This is just what the surrealists took from Freud. When Max Ernst made his Oedipus pictures, he didn't show a boy with his mother, but hybrids of animal and human figures in unreal scales and situations. These impossible creations are the results of the dream-work described by Freud. Through this technique, what the Surrealists did for art was what Freud did for dreams, slips of the tongue and free association. Rather than seeing them as contingent and meaningless aspects of existence, worthy of little attention, he turned them into enigmas to be deciphered. With Surrealism, a painting or sculpture or collage

be looked at than a question.

Can Manjusri be considered a Surrealist painter?

Figure 01. The Looking Glass 1978
L.T.P. Manjusri (1902-1982)
Watercolour on Paper 41 X 36.5cm
Image Credits: http://www.artsrilanka.org/retrospective/manjushri/19781.html

Figure 01 depicts Manjusri's *The looking Glass* done in 1978. This painting bears a central female figure that is surrounded by exotic flora and fauna. Some of the floral elements are reminiscent of his extensive work on temple murals such as the red flower towards the right side of the painting. The scale of this painting with regard to bodily proportions is unrealistic. The face that is reflected through the looking glass is relatively smaller compared to the rest of the body. Also, her breast is comparatively larger. In place of her right arm is a growing branch of a tree and from the top part of this branch, a bunch of weeds seems to spring out. This painting as with most of his latter works bears a sexual theme. This is evident from the nude female figure and also her emphasised breast. Furthermore, she glances invitingly at the viewer through the reflection of the looking glass. The soft simple form of the figure, its unrealistic scale and the handling of the subject matter make it possible to align his work with other Surrealist painters of his time.

The painting shown in figure 02 was done by Manjusri in 1945. This painting too can be taken as a classical example of the appearance of elements of Surrealism in his work. This work bears a minimalist approach similar to that used by artists such as Joan Miro.

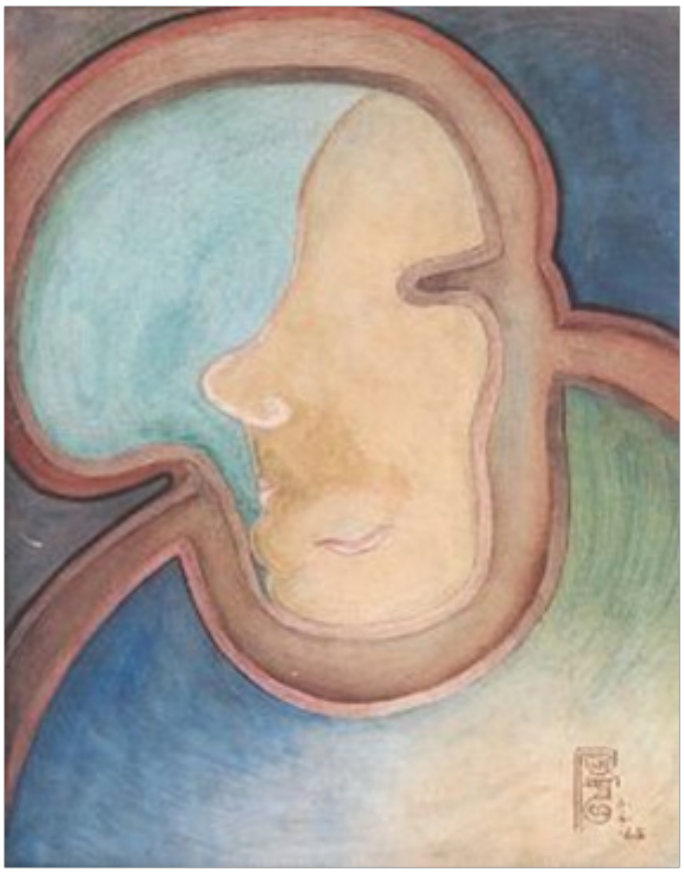

Figure 02. Faces in Harmony 1945
L.T.P. Manjusri (1902-1982), Water colour on Paper 30.5 X 24 cm
Image Credits: http://www.artsrilanka.org/retrospective/manjushri/19455.html

Two faces are merged together and are made visible through a skull shaped hole. This portal that is visible through the faces is floating in the air. The muted colours and the shapes give this painting a simplistic, dream-like appearance. The scull shaped formation could be a mirror that reflects the inter-wining of the two faces. It can also be viewed as the inner-person who is residing within the physical sphere of the skull. As in his Looking Glass (figure 01), there are no identifiable faces in the painting thus making it remain elusive and out of touch with reality.

Figure 03 shows another painting done by Manjusri titled *The Mermaid* during the same time period, 1972. Images of fish are a recurring theme in Manjusri's work. In dream symbolism, fish is referred to as the emotional aspect of a person's being and their ability to be wise. It is also associated with fertility. In Greco-Roman and Eastern Indian mythology, the fish was a symbol of change and transformation. In Buddhism, the fish symbolises happiness and freedom (Ellietordoff 2013). The fish also makes an appearance as one of the eight sacred symbols of the Buddha. The repetitive appearance of fish in his work could be due to these influences he had at an earlier stage in his life.

It could also symbolise his transformation from a style of highly disciplined traditional art to that of a more modern, liberated style. The fish, the girl and the snail shell are seemingly contradictory objects that are placed together in the picture plane. Although the background is an underwater setting, the objects seem to be huddled together and stationed in one place while the background seems to be moving. The blue eyes and the blond hair of the mermaid suggest Western influence. This painting too bears a sexual connotation as the body of the girl curves to form a shape that is similar to the anatomy of the female reproductive system (the womb and ovaries). The facial expressions of the fish and the girl seem placid and peaceful compared to the moving backdrop of water.

Figure 03. The Mermaid 1972
L.T.P. Manjusri (1902-1982), Watercolour on paper 73.5 X 59cm
Image Credits: http://www.artsrilanka.org/retrospective/manjushri/19721.html

However simplistic his approach to these painting maybe, a deeper reflection shows that they are laden with symbolism and meaning although it may be eluded from the viewer. This is a prominent characteristic of Surrealist paintings whereby the actual meanings of the paintings were hidden behind bizarreness and absurdity (Leroy 1994).

Considering the changes that occurred in the field of visual art in the 20th century Sri Lanka, it is evident that Manjusri was a pioneering force in introducing the elements of European Surrealism to painting in the country.

Although there were painters such as Justin Deraniyagala in the 43 Group whose work reflected abstract elements, the usage of Surrealist elements and subject matter comes into light with the transition of Manjusri from Traditional mural artist to a modern painter.

The impact of Surrealism on post modern art in Sri Lanka

Although not established as a genre per say, Surrealism did leave its mark in the field of Sri Lankan art and culture. Pioneering works such as those of Manjusri paved the way for a more daring, bold and flamboyant group of artists to be emerged. Among these is SeevaliIllangasinghe (b.1945), who is mainly a self-taught artist. Although his style is more closely akin to Neo-impressionism, his works show an unearthly and eerie nature which is apparent in the works of the Surrealists as well. Another two artists whose works show elements of Surrealism are Michael Anthonisz and Richard Weinmann Their works are shown in figures 04 and 05.

Figure 04. Conglomerate IV undated
Richard Weinmann, Watercolour on paper 61 X 80cm
Image Credits: http://www.artsrilanka.org/

Figure 05. Through the looking glass 2000
Michael Anthoniesz, Oil on Canvas 66 X 59 cm
Image Credits: http://www.artsrilanka.org/

The above two paintings shown in figures 04 and 05 display the doubtless influence that Surrealism had on their work. In Weinman's Conglomerate IV (figure 04), there are a number of incongruent and incompatible elements that are juxtaposed among one another such as, an elephant, a shadow of a woman carrying water, a drummer and a foreground figure. These figures seem to levitate in a space that does not have any boundaries. Also the background carries no relevance to the unlikely figures in the picture. In Anthoniesz's Through the looking glass-2000 (figure 5) too Surrealist elements can be observed. The eerie looking rows of trees form an arch to form an optical illusion of a hooded figure. Optical illusions were another trademark characteristic of Surrealist paintings. Anthoniesz has rendered this method in his work. A closer look at this painting however, will enable the viewer to make out the shadow of Leonardo Da Vinci's Mona Lisa lurking in the background. The tree shapes are painted in a transparent manner so as to make thisalso visually available to the viewer. These and the works of other post-modern painters such as Sujeewa Kumari (b.1971), Dumith Kulasekara (b.1979), Fareed Uduman (1917-1985) and S. H. Sarath too reflect the influence of Surrealism in modern Sri Lankan paintings.

Conclusion

The focus of this article was to formulate an analysis as to whether Manjusri can be considered a Surrealist and whether his paintings fall into the category of Surrealist paintings. Whilst the former part dealt with the concepts of dream analysis and Surrealism, the latter and most part of this chapter was dedicated to find elements of Surrealism in the works of Manjusri. This article also discussed in brief the influence of Surrealism on other modern and post-modern Sri Lankan paintings.

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A Pedagogical Tool to Teach Musical Expression through Visualization of Musical Cues

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Abstract

Many musicians agree that some music recital performances seem more academic than artistic. These performances fail to convey the character of the music. An important aspect of teaching music is to develop abilities of students in musical expression. Performance studies have shown that music teachers and students are often unaware of tools they could utilize to develop musical expression. In order to find a solution to this problem, this paper based its groundwork on Patrick Juslin's GERMS model. The GERMS model provides a mechanism to conceptualize musical expressions as a multi-dimensional phenomenon. In this work, we introduce an innovative visualization model named EmoGraph that can be used to visualize the emotional expression aspects of music scores using the GERMS model in order to help the students grasp the cues of musical expressions. This visualization tool helps to capture the cues for emotional expressions in a musical scorefor the purpose of using it as a teaching tool to teach musical expressions. This work also introduces an experimental setup that can be used to evaluate the effectiveness of the proposed teaching tool at an undergraduate academic environment.

Keywords: Musical-Expressions; Emotions; GERMS; Pianists; Musical-Performance

Introduction

How often have we heard performances that were played with absolute faithfulness to the score but which failed to convey the character of the music? A study conducted by Karlssohn and Juslin on teachers' opinions about musical expression showed that teachers thought that musical expression was one of the most important elements in music making and teaching (Karlsson & Juslin 2008). However, many teachers do not know about the tools that could aid in the development of musical expression. This work explores and examines recent studies in music and emotion in order to develop successful strategies that can be used to teach musical expression. This work focuses on just one aspect of musical expression; that is emotional expression. This aspect has been noted as the least explored in terms of research and also one of the hardest elements to teach.

The GERMS Model as a Pedagogical Tool for Musical Expression

The term "musical expression" encompasses many different facets, meanings, and definitions. In his study, the "Five Facets of Musical Expression: A Psychologist's Perspective on Music Performance," Patrick Juslin constructed the "GERMS" model, which is based on a wide array of previous research from multiple sources on this subject (Juslin, 2003). This model can be used as a tool to analyse musical expression in performances as well as a teaching model. He proposed five facets for this model, which he believes to be a multi-dimensional approach to enhancing musical expression. The five facets of this GERMS model are: Generative rules (G), Emotional expression (E), Rhythmic properties (R), Motion principles (M), and Stylistic unexpectedness (S). For the purpose of this paper, This work examines only the application of the "E-component" of the GERMS model, which is "Emotional Expression."

The "Emotional Expression" component has been noted as the most challenging and complicated aspect to establish data (Meyer 1957). In addition, there are different uses of the word expression in the literature, and sometimes it has been used to refer to the emotional qualities of music by listeners (Davies 1994). Nonetheless it is accepted that these two senses of the word are related (Davies 1994). Thus Juslin and Persson defines "Emotional Expression" as the "...use of systematic variations in performance parameters (such as timing, dynamics, timbre) to convey emotions to listeners(Juslin & Persson 2002)."

Sometimes things that are most important to learn are the most difficult to teach (Karlssohn & Juslin 2008). Musical expression should be taught from the beginning, but emotional expression can be hard to teach. This does not mean that the teacher should completely overlook the possibilities of encouraging emotional expression; rather, the teacher will need to incorporate it whenever possible. Elementary-level repertoire often lacks the properties which contribute to emotional expression due to limitations in scope (for example, pieces which are extremely short). On the other hand, intermediate piano literature can provide a good foundation for developing the emotional expression component, because the pieces become much more elaborate in terms of their content, harmonic language, and dynamic range, where opportunities to express one's self abound. In this work we recommend and use intermediate repertoire for teaching emotional expression to students.

Emotional response and musical expectation are closely linked (Meyer 1957). The theory here is that emotion is experienced when a musical outcome is different from what is expected by the listener. For example, when the expectation is a perfect cadence but the actual outcome is an interrupted cadence, this evokes an emotional response in the listener and it has been found that listeners' familiarity with pieces of music does not affect this emotional response. Emotional expression involves the use of cues which are interpreted by both the performer and the listener. These cues might be tempo, loudness,

timing, timbre, etc., and they are used by the performer to express emotions such as anger, sadness, and love/tenderness(Juslin 2003). There is evidence to suggest that happiness is expressed through "fast tempo, high sound level, staccato articulation, large articulation variability, fast tone attacks, and bright timbre"(Juslin 2003) whilst sadness is expressed through "slow tempo, low sound level, legato articulation, small articulation variability, slow tone attacks, and dull timbre" (Gabrielsson & Juslin 1996).

Using the Emotional expression (E) component of the GERMS model it is possible to quantify the level of emotional expression of a musical score. Multi-dimensional nature of the quantification of the musical scores requires a visualisation that can display multivariate data. In this work we suggest the use of a standard radar-chart to visualise the musical expression as a teaching aid named EmoGraph, which is a six dimensional graph that combines the tempo, temp-variability, sound sound-variability, articulation and articulation-variability. Figure 1 shows the basic visualisation template suggested in this paper. Basic colours Red, Green and Blue are used to separate the tempo, sound and the articulation as the background. The colour of the resultant EmoGraph will combine the Red, Green and Blue intensity based on the values required to represent the respective musical score similar to what is normally done on a standard heat map visualization.

Table 1 shows the suggested mapping for the visualization and Figure 2 show samples of visualizations for the basic emotional expressions for Happy, Sad, Tender, and Anger based on the suggested visualization scheme in this paper.

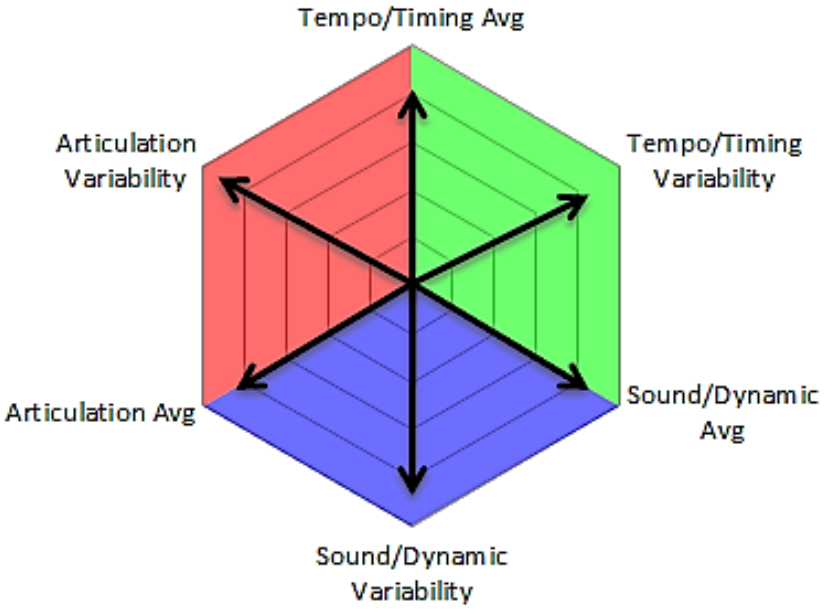

Figure 1. Basic Musical Score Visualization (EmoGraph) Template

Musice	Nominal Scale Categories for Musical Cues	Value Range	Vis. Step Wt.	*Example Computation For "Happy"*	
				Musical Cue Value	*Visualization Weight*
Tempo-Average	V.slow / slow / med.slow/ med.fast / fast / V.fast	1-6	0.167	(Fast)	0.83
Tempo-Variability	Low / medium / high	1-3	0.333	(low)	0.33
Sound-Average	ppp / pp / p / mp / mf / f / ff / fff	1-8	0.125	(ff)	0.88
Sound- Variability	Low/ medium / high	1-3	0.333	(low)	0.33
Articulation-Average	Legato / strong / accents / portato / staccato	1-5	0.200	(staccato)	1.00
Articulation-Variability	Low / medium / high	1-3	0.333	(high)	1.00
$Visualization\ Weight = Musical\ Cue\ Value \times \frac{1}{Max\ Musical\ Cue\ Value}$					

Table 1. Mapping of Musical Cuesfor Visualization

In Table 1, the range of values for each attribute and the value selections for each emotion is based on the suggestions in the GERMS model (Juslin 2003). Last two columns of Table 1 includes the computation of the visualisation mapping for the emotion "Happy" as an example. Note that the clipart images used in conjunction with the corresponding visualization is intended only for the purpose of enhancing the emotional expression and can be replaced with any other appropriate artwork.

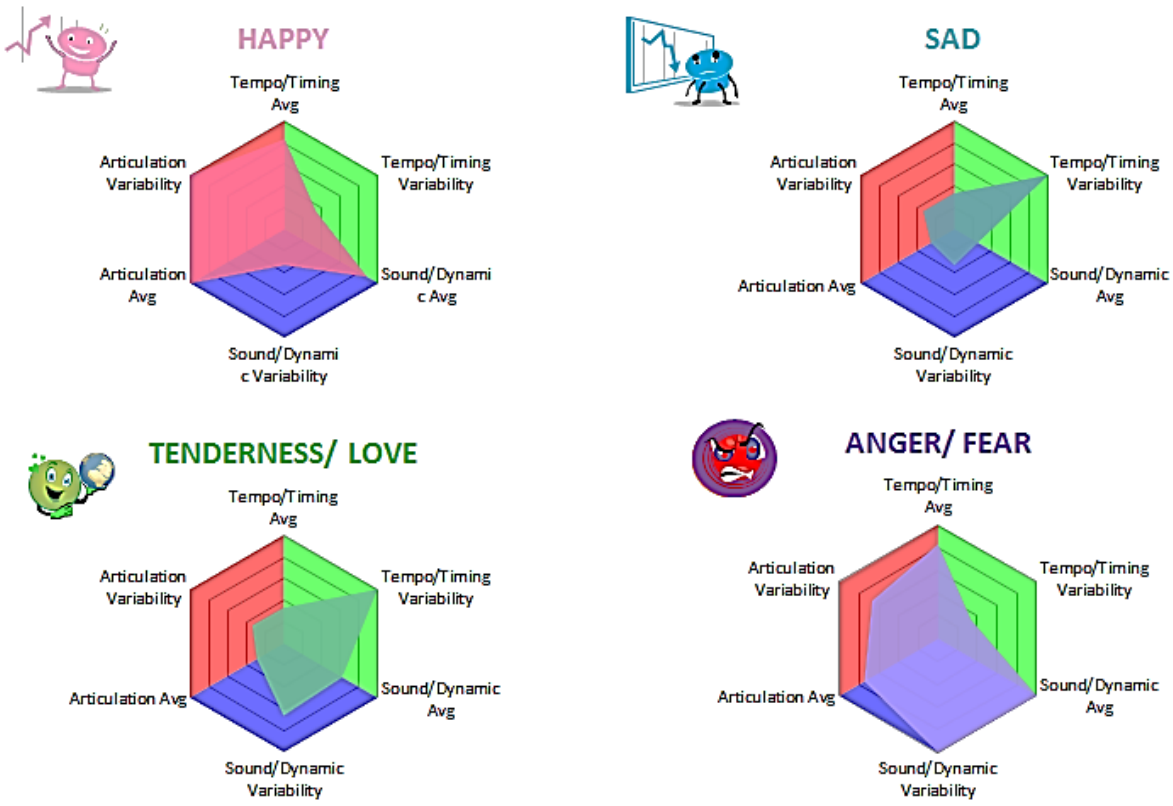

Figure 2 EmoGraph Visualization of Expressive Cues

Methodology

The purpose of this study is to introduce and examine the effects of utilizing the computer-based visual model as a teaching aid to increase musical expression in piano performances. Subjects are undergraduate piano majors and minors at the Department of Western Music of the University of Visual and Performing Arts, Colombo, Sri Lanka, enrolled for class piano study. Subjects were asked to briefly review a piece that has been previously studied. We identified two sections that were musically challenging in the piece where students were more likely to play without much musical expression. After recording a play-through of the piece they rated the level of musical expression on a scale of 1 to 5 (with 1 indicative of "no expression" and 5 representative of "Highest level of expression") when performing each of the passages. Approximately one week following, one group received instructions on the "visualization'' to develop musical expression to the piece while the control group did not, instead they practiced and recorded the piece. The group with EmoGraph visualization were allowed to practice for several minutes. Following this session they recorded a play-through of the piece. Figure 3 shows a sample visualization for one musical score used in the study by modern composer Emma Lou Diemer called "Anger". The colour of the graph indicates more Red and Blue and also the values indicate more sound and articulation in parts of the score that were selected for emotional expressions.

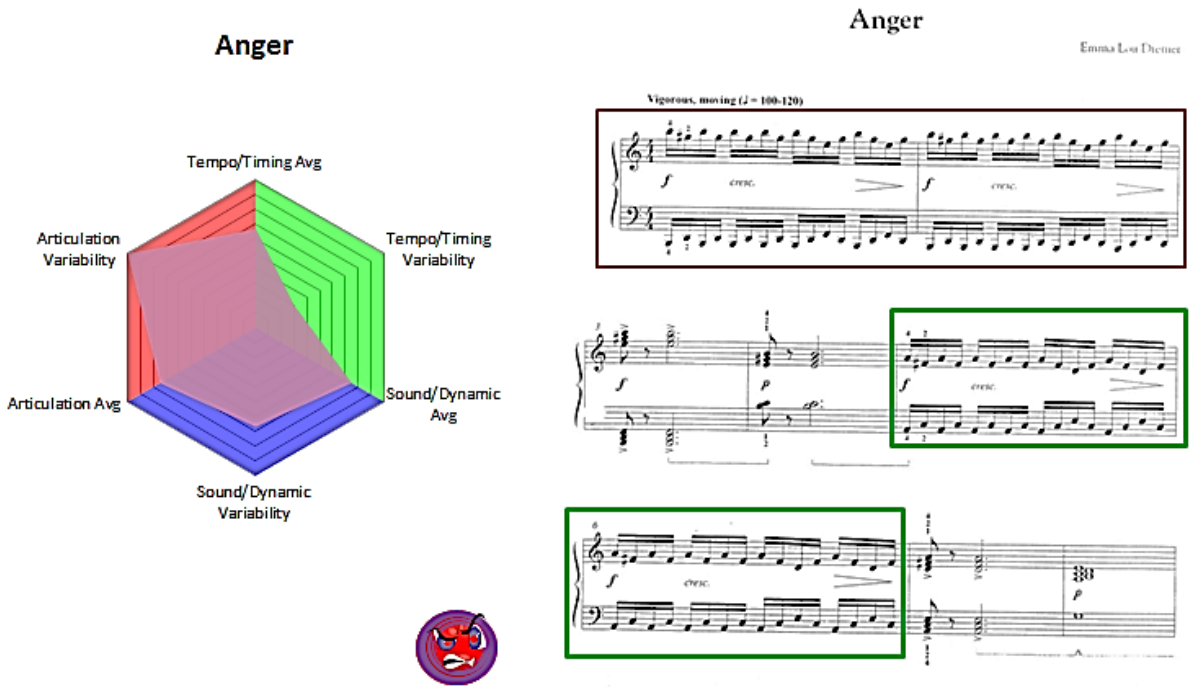

Figure 3 Example Visualization for "Anger" by Emma Lou Diemer

The selected parts are highlighted in the score. Note the difference between this visualization and the visualization for the emotion "anger" given in Figure 2. Figure 2 shows the visualization for the particular emotion 'anger' and Figure 3 shows the visualization for the musical score "Anger."

Following the process of performing in the class room for the study, audio recordings were extracted, compiled, and randomly ordered on a CD. Five independent adequately qualified judges were requested to listen to the recordings of the pieces and rate each performance, based on an evaluation rubric taking into account performers' note, rhythm accuracy, and musicality. A basic statistical comparison with the control group is sufficient to show the effectiveness of the EmoGraphs as a teaching aid to teach musical expression.

Results and Discussion

Musical expression is a very important aspect in music. Teaching musical expression is a challenge to most teachers based on available studies and is also evident when witnessing most university music student performances. Most university music majors also choose teaching music as their future career. It is vital that teachers, engaged in teaching university students utilize all available tools to teach musical expression so that the future generation of music teachers are exposed to these techniques. Emotional expression is a major component in musical expression. This work introduces a novel visualization technique called EmoGraph based on the GERMS model to extract the emotional cues in a musical score to enable a student to easily identify and relate to the expected emotional expressions in a repertoire.

The teaching tool will prompt, guide and help the student to identify the cues but still allow the freedom to express emotions based on their own interpretation of the score.

A basic experimental study is also outlined to test the validity of the proposed tool. Subjects' performance evaluation for musical expression is based on human judgements. In practice it is very hard to collect evaluations from experts in the field of musical judgement on a voluntary basis, thus the data collection for the study is still continuing with most of the data collected. Preliminary results indicate a positive impact to the use of the EmoGraphs. To make a scientifically conclusive judgment all results should be compiled and statistically analysed.

As a future study it is suggested to do the subject performance evaluation for musical expression based on software analysis and visualization of subjects' performances, on musical tracks using a software such as "Reason" (Propellerhead 2015). Most of the modern piano keyboards used for teaching university class piano courses allow the recording of performances as MIDI tracks and currently, the available audio recording and editing software such as "Reason," allows the automated capture and visualization of emotional cues such as sound, tempo and articulation. This cannot completely eliminate the human judges but can reduce the involvement. The use of computer tools in conjunction with the voluntary human judges could address the issue of data collection faced by the current work.

The framework introduced in this study can also be used appropriately for the other aspects of the GERMS model. This could lead to the introduction of other visualizations similar to the EmoGraph that can aid in teaching other aspects of musical expressions that are vital to produce aproperly interpreted,outstanding musical performance that is not a mere academic mechanical reproduction of the musical score.

Conclusion

An important aspect of teaching music is to develop musical expression though it is considered hard in many studies. This work attempts to address the difficulty of teaching musical expression to students using a visualization based on the GERMS model. This visualization captures the musical cues in a musical score for emotional expression as an EmoGraph that can be used as a teaching aid. A six dimensional radar-chart combined with a heat map is used as the basis for the EmoGraph visualization. An experimental framework that can be used to evaluate the proposed EmoGraph based teaching of musical expressionis also suggested in this work.

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Idiosyncratic and Mutual Features of Violin Playing in Kaffirinna and Joget

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Abstract

This study explores some features of violin playing in Joget which has been developed since early 16th century on the Malay Peninsula. Approximately at the same time in Sri Lanka, Kaffirinna was initiated as an adaptation from Portuguese music imported through the colonial power. The violin is a prominent musical instrument used in Kaffirinna, too.

This paper will examine violin playing techniques used in Joget and in Kaffirinna that will be analyzed through transcriptions of comparable elements. A concise literature review can help to support with information on the historical background and development of violin playing in both places. This study focuses on the analysis of idiosyncratic and mutual features found in both Joget and Kaffirinna violin playing styles. By doing so, this study may contribute to understand diversity as well as commonalities of Portuguese cultural traces across a wide area.

In various ways, colonialism patterned the mobility of performing arts within Asia, especially among colonies that were ruled by the same power. The question to be answered is how similar sources of adaptations were realised in different colonies and how the derived music does sound today.

Keywords: Kaffiringha, Joget, Portuguese Music, violin playing, music migration

Introduction

Violin playing has been developed since its inception in the early 16th century on the Malay Peninsula. At approximately the same time in Ceylon, a genre called Kaffirinna was initiated as an adaptation from Portuguese music imported through the colonial power. The violin is a prominent musical instrument used in Kaffirinna as well as in the genre Joget evolving on the Malay peninsula. This paper will examine violin playing techniques used in both genres through the analysis of idiosyncratic and mutual features found in both violin playing styles. By doing so, this study may contribute to the understanding of diversity as well as the commonalities of Portuguese cultural traces across a wide area. In various ways, colonialism patterned the mobility of performing arts within Asia, especially among the colonies that were ruled by the same power.

As this paper examines idiosyncratic and mutual features of violin playing techniques used in Joget and in Kaffirinna, a representative amount of jogets that are said to be based on Portuguese culture had to be analysed.[1] The joget 'Jing Kling Nona' was found to be of special interest to this study. Jing Kling Nona is a very similar piece to the 'Ceylonese Lancers', the Kaffirinna arranged and published in transcriptions by Norbert Rodrigo in 1929. Therefore, this example is chosen. At the same time the Joget Renung Renung is selected to be looked at. It is played by the Malaysian violinist Hamzah Dolmat. The selected Sri Lankan Kaffirinna is played by the violinist M. K. Roksami. Further inspiration comes from Abdullah's study "Idiosyncratic Aspects of Malaysian Music: The Roles of the Kompang in Malay Society" despite of some other basic works on cross-cultural phenomena.

01. Music Times Deluxe and Adobe Audition are used to transcribe music and to get spectral pictures.

Background, History and Musical Features of Sri Lankan Kaffirinna

In 1415 Portugal started its maritime expansion of the African continent (Coates 2001: 59). The Portuguese discovered islands in the Atlantic and along the African coasts before coming to South Asia. In October, 1505, eight vessels arrived at Cochin carrying 1500 soldiers under the command of Dom Francisco de Almeida, who had been appointed by the King of the Portuguese (Muzzi 2002: 23). Here, according to Hooker (2003: 72–73), the Portuguese implemented a plan of commercial contacts instead of military control. Ceylon or present day Sri Lanka was a Portuguese territory from 1505 to1658 (Pieris 1920: 13). The Portuguese brought their slaves called 'Kaffirs'[2] from Mozambique to Ceylon for the purposes of forced labour and warfare (Ariyaratne 1985: 214).

02. The word Kaffirs is used to symbolize all African citizens by the Portuguese people (Ariyaratne, 1985:22).

Kaffirs brought their cultural experiences with them and contributed to the changes in the colonies. According to Abayasinghe, except for a few cases, there is no evidence that the Portuguese men came to Ceylon with their wives. Therefore Portuguese, mainly craftsmen and among them cabinet and instrument maker, married Ceylonese girls and stayed within the country (Abayasinghe 1966: 104). There are few Portuguese melodies that still exist in Sri Lanka, especially alongside coastal areas like Putlam, Negombo, Ja-Ela, Modara, Moratuwa, Chilaw. The rest are mainly modern compositions, which are composed by integrating the mood of Kaffirinna with new melodies. Ariyaratna (1985) cites Fernando (1904) who states some transcriptions of old Baila-Kaffirinna[3] songs can only be found since 1894 in Ceylon. Oral traditions of Indo-Portuguese describe and express a Portuguese and Portuguese-African cultural individuality within a Eurasian discourse (Jackson 1991: 624).

03. Baila and Kaffirinna are often used with a synonymous meaning though they have different histories.

In the 17th century, a Kaffirinna ensemble consisted of a violin, mandolin, rebana[4] , and guitar. Today congas, tambourine, maracas, shaker, accordion, banjo, banjolin and bass guitar are also included. According to Jayasuriya and Pankhurst, Kaffirinna music is a cultural combination from three continents: Africa, Europe and Asia. Later, it changed into Baile or dance associating Portuguese and Spanish background. He further mentions that though the Kaffirinna music has an 'African' origin nonetheless the Sinhalese and the Portuguese burghers contributed to the evolution of this music. Kafirinna is a popular music form in Sri Lanka and illustrates cultural transmission (Jayasuriya & Pankhurst 2003: 258–259). With the advent of the Portuguese in Ceylon in 1505, Baila[5] was introduced. The term 'Baila' that is referred to as 'dance' denotes a particular vocal genre in today's Sri Lanka. Meanwhile, baila has been ingrained with Sri Lankan culture in to a level, that its Portuguese roots are not felt foreign anymore. The term Kaffirinna is another term synonymously used as the term Baila. In reality the two terms Baila and Kaffirinna are used together and denote the same genre. (Ariyaratne 1985: 214).

04. Rebana in Ceylon/Sri Lanka denotes a frame drum with nailed on skin.

05. Portuguese dance, later often synonymously used to Kaffirinna.

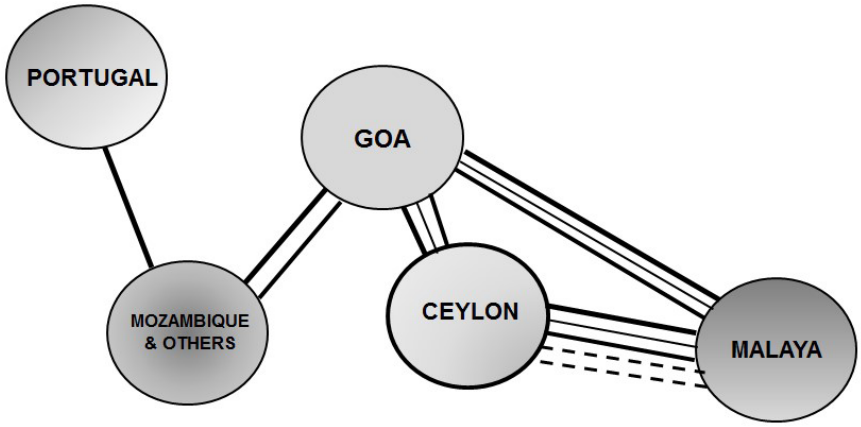

Fig. 1: Cultural migration through colonization: Portugal on the way to Asia

Baila dance is said to be enriched with Spanish music in Ceylon and has a 'simple' melodic structure (Ariyaratne 1985: 72). The term Kaffirinna came to Ceylon as a result of Kaffirs brought to the country, mainly from Mozambique. There is one Kaffirinna called 'Villang de Mozambique' which means countryman who came from Mozambique (Ariyarathne 1985: 25) which may give evidence that Kaffirinna has a relationship with Mozambique. Ariyarathne emphasizes that Kaffiringa is not merely a production of Kaffirs who were brought from Goa, but also Sinhalese and Portuguese who have equally contributed importantly to the development of Kaffirinna (Ariyarathne 1985: 24). Four hundred years ago at the time of the Portuguese occupation of Melaka, Ronggeng emerged among the inhabitants of Melaka.

Background, History and Musical Features of Malaysian Joget

The Portuguese captured Melaka in 1511 (Desai 1969: 502; Sarkissian 1995: 37) and started a new era in the Malay Peninsula. The Melaka port was also visited by ships and merchants from Arabia, Persia, China, India, Japan, Indonesia, Ceylon and Bengal (Muzzi 2002: 23). During that period, it was the busiest and the most cosmopolitan port in Southeast Asia (Sarkissian 1995: 37). Working with Indian merchants, the Portuguese traded Indian textiles exchanged for spices from the centres in Sumatra and eastern Indonesia (Hooker 2003: 74). In this context, a new management was established and a new currency was created in Melaka. A number of catholic churches were constructed. At the same time, a lot of Portuguese people got married to the local ladies. Those Portuguese people were skilled artisans, farmers, craftsmen, or merchants. [6]

06. By the later 16th century, "there were over 300 Portuguese " Casados" and the number of persons with mixed blood never stopped to grow. This miscegenation was the main asset of the Portuguese in Melaka, as in Brazil" (Muzzi 2002: 28–29).

Referring to Matusky and Tan, in the 16th century, Portuguese inhabitants brought the violin to the Malay Peninsula. Initially, the violin had played the major role in accompanying both Kaffirinna and Joget practices and later accordion was added to Joget ensemble adapting a similar role as a violin. The violão (guitar-like instrument) strummed fundamental chords while rebana, tambourine and triangle players completing the rhythm patterns. Nowadays, types and the number of musical instruments change from performance to performance depending on the availability of musicians. For instance, the rebana can be left out if there is no rebana player in the ensemble, and more than one guitar can be used to accompany a singer mainly for night time shows in Portuguese Village of Melaka. A synthesizer also replaces musicians if other instrumentalists are unavailable (Matusky & Tan 2004: 382). The Branyo song called Jing Kling Nona is often sung with Malay words, while other Malay Joget pieces, for instance Joget Pahang is also sung by the Portuguese musicians using Kristang language.

Miller and Williams indicate that it was known by the name Ronggeng until the early twentieth century, and with the construction of modern Joget, the term Joget generally substituted the Ronggeng as the name of the genre The traditional Joget was accompanied by an ensemble which consists of violin, a knobbed gong, a flute, and at least two rebana or gendang (Miller & Williams 2008: 243). In modern Joget, musicians use Western instruments for outdoor or dancehall-like settings. Joget indicates music played in fast tempo, there is no slow Joget (Tan & Dias 2014: 0:03:02-0:03:10). Ronggeng is possibly a bit slower in tempo than modern Joget (Norihan, Dias & Jähnichen, 2014: 0:12:25-0:13:25).

Genre	Potuguese community in Melaka	Malay musicians	academicians
Joget	Joget is also known as Branyo	Joget has a typical rhythm pattern emphasized on duple and triple meter	Tan says that even other Malaysians declare Branyo as Joget, it is another dance form which is similar to Joget and popular among the Portuguese community in Melaka (Tan & Dias, 2014: 0:00:00-0:00:48).
Branyo	Joget is also a type of Branyo	"Branyo has the same tempo as Joget, therefore in Malaysia we call it Joget" (Norihan, Dias & Jähnichen, 2014: 0:04:16-0:05:31)	Referring to Sarkissian, In 1952 a set of folksongs and dances from the Portuguese mainland were introduced as standard pieces in almost all performances of music and dance by the Portuguese community in Melaka. (Sarkissian, 1993: 39–41).

Fig. 2: Some Perceptions on Joget and Branyo

Earlier Branyo types were probably absorbed into this repertoire and it seems to be difficult to differentiate between early and modern types. In Branyo songs accompanying the dance, Kristang language is used. The audience is invited to dance with Branyo dancers similar to Joget dance sessions (Sarkissian 1993: 39–41). Tan states that even other Malaysians declare Branyo as Joget, it is another dance form which is similar to Joget and popular among the Portuguese community in Melaka (Tan & Dias 2014: 0:00:00-0:00:57). Marina Dankar, Portuguese descendant lives in Melaka says "Jingli Nona song is one of Branyos coming from Portugal" (Danker, Dias & Jähnichen 2014: 0:03:38-0:04:15). A Malay musician, Norihan says "Branyo has the same tempo as Joget, therefore in Malaysia we call it Joget" (Norihan, Dias & Jähnichen, 2014: 0:04:16–0:05:31).

In the 16th century, the Portuguese brought the violin to the Malay Peninsula. Initially, violin had played the major ro le in accompanying both Kaffirinna and Joget practices and later accordion was added to Joget ensemble adapting a similar role as the violin. Nowadays, types and the number of musical instruments change from performance to performance depending on the availability of musicians. The Branyo song called Jing Kling Nona is often sung with Malay words, while other Malay Joget pieces, for instance Joget Pahang is also sung by the Portuguese musicians using Kristang language. Surprisingly a Ceylonese Kaffirinna piece titled "Ceylonese Lancers" transcribed by S. A. Norbert Rodrigo in 1929 has a close resemblance to Malayan Jing Kling Nona.

Musical Analysis

Baila and Kaffirinna are two terms used interchangeably. However, there are few Portuguese Baila compositions or melodies still in existence coastal areas in Sri Lanka. The rest that is generally found are modern compositions, which are composed matching the mood of Kaffirinna songs with new melodies. Referring to Jayasuriya and Pankhurst, the Sri Lankan Kafirinna has little in common with the lamenting tone and masochist lyrics of the pieces in dance genre 'Goan-Mando' which was once known as Cafrinho. Possibly the Sinhalese input to the Sri Lankan Kaffirinna distinguishes these two forms as separate genres (Jayasuriya & Pankhurst 2003: 258). The similarly sounding Kapariyo is the name of a dance song used in Sumatra's Minang Kabau coast (Kartomi 2012: 406). Since the early 20th century, Ceylonese music composers have incorporated elements of Kaffirinna in their new compositions to make it more attractive.

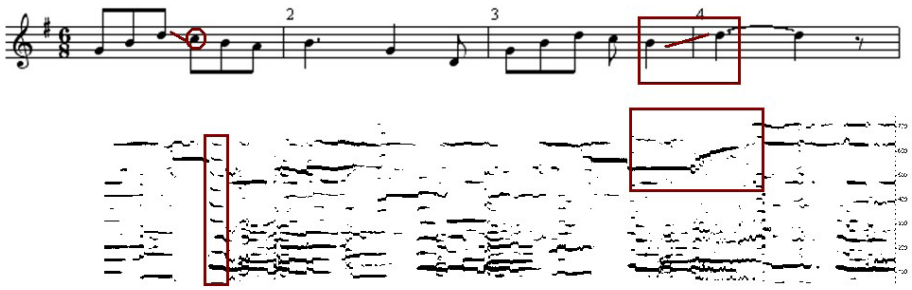

Fig. 4: Glide notes in violin playing in Sri Lankan Kaffirinna (Rocksamy, 1967: 0:00:58-0:00:59).

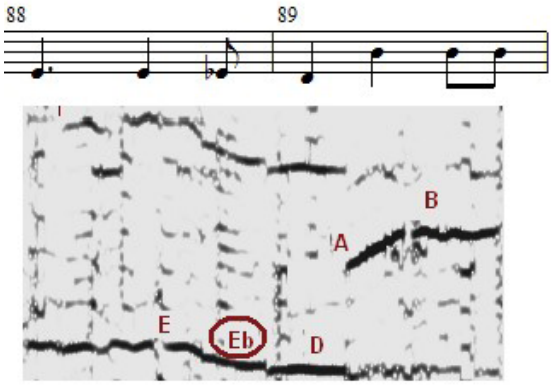

Fig. 5: Glide notes in violin playing in Sri Lankan Kaffirinna (Rocksamy, 1967: 0:02:34-0:02:36).

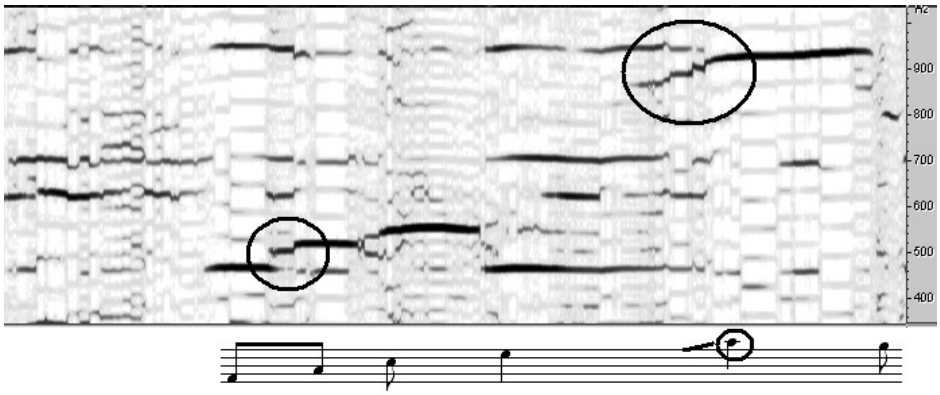

Fig. 6: Glide notes in violin playing in Sri Lankan Kaffirinna (Rocksamy, 1967: 00:00:59-00:01:00).

Before the 1960s, violin, mandolin, rebana, and guitar (not the modern guitar) are playing Kaffirinna, while the traditional Joget comprised violin, a knobbed gong, and rebana or gendang. In rare cases, a piano played with the Kafrinna ensemble, especially in broadcasting programmes, which never happened to Joget. While the mandolin brought to Ceylon by the Portuguese was widely accepted, this instrument could not gain a foothold in Malaya. Using of gliding melodic movements is one of the idiosyncratic features of violin playing in Sri Lankan Kaffirinna. This feature is generally applied in moderate tempo that is often performed in order to connect beats. However, I could not trace any gliding notes in Malay Joget as used in Kaffirinna.

Ceylonese Lancers (Kaffirinna)

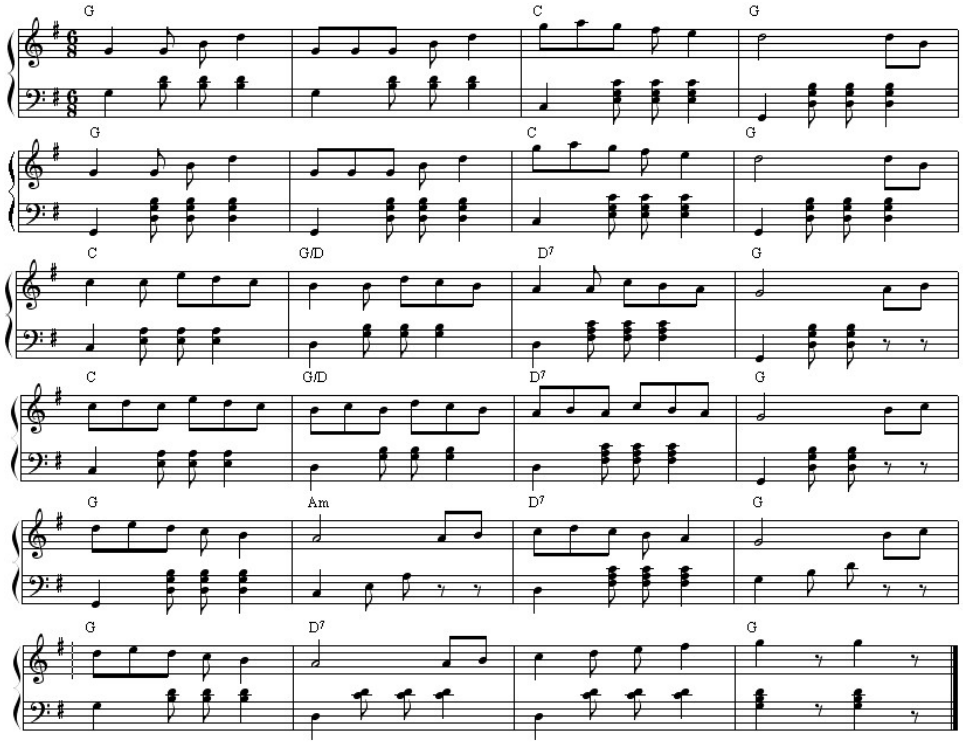

Fig. 7: second stanza of Ceylonese Lancers composed by S. A. Norbert Rodrigo in 1929 (Ariyaratne 1985: 101–102).

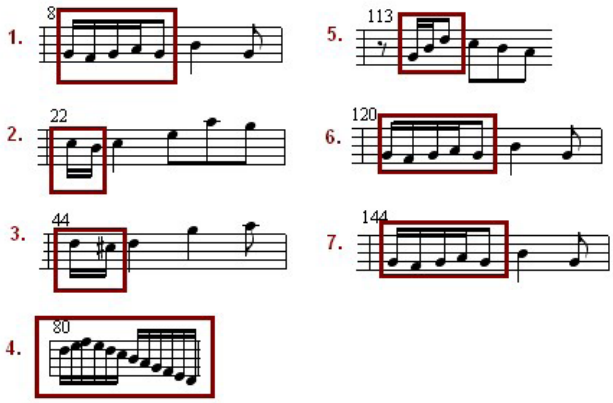

Fig. 8: Fast melodic movements of violin playing in Sri Lankan Kafirrinna.

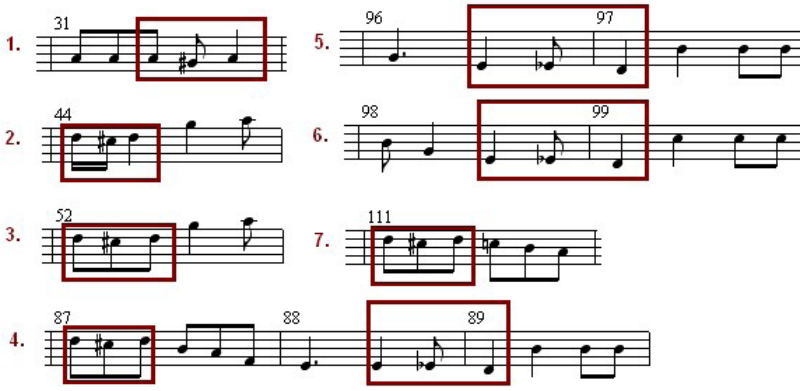

Fig. 9: Chromatic progressions of violin playing in Sri Lankan Kaffirinna

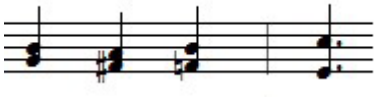

Fig. 10: Chromatic progressions of violin playing using two strings in Sri Lankan Kaffirinna

Figures 7-10 show how the melodic lines are developed in Sri Lankan Kaffirinna on violin. Another speciality of violin playing in Sri Lankan Kaffrinna is the use of chromatic progressions (figure 10). Sometimes chromatic progressions play on the violin using two strings. Another feature of violin playing in Kaffirinna is the use of fast melodic movements. Normally, violinists derive melodic improvisations from the main melodic patterns. In Kaffirinna ensembles, the violin is played in standing position. Kaffirinna violinists usually keep the violin in the bend arm on waist level while playing. Despite, Malay Joget violinists play in sitting or standing position resting the violin on the shoulder.

Melodic Movements in in Joget music and in Branyo music

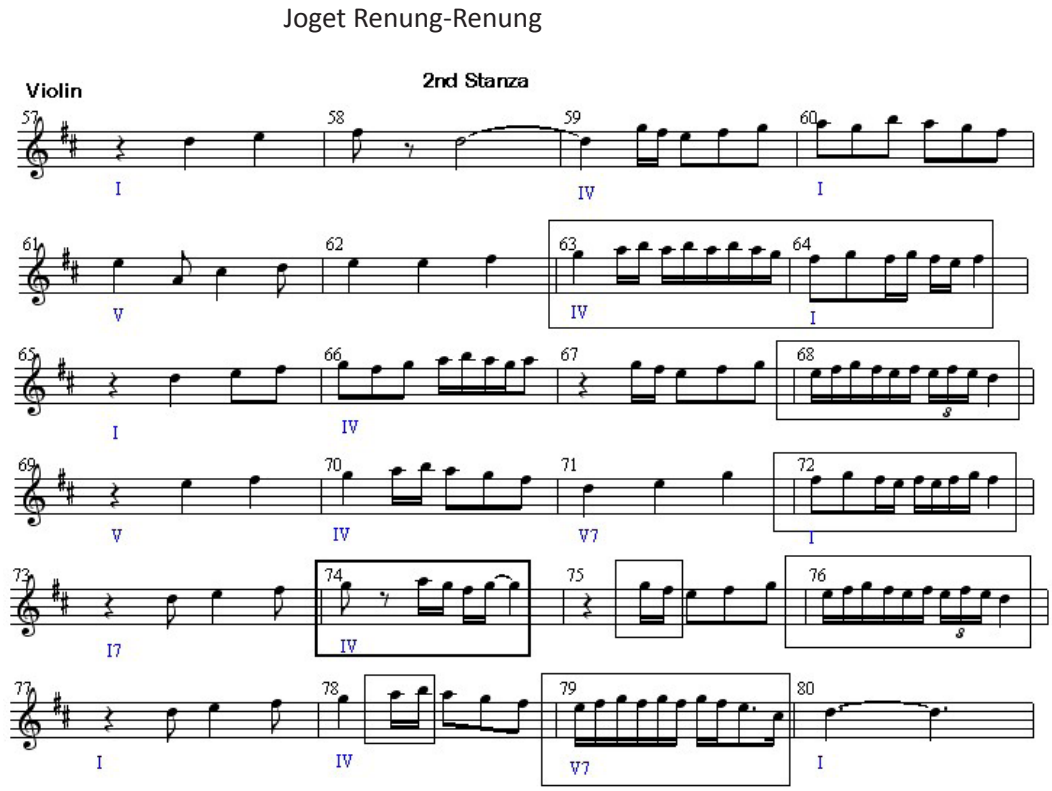

Fig. 11: Melodic movements of violin playing in Malaysian Joget (Excerpt of Joget Renung Renung played by Hamzah Dolmat, Transcription: Ruwin Rangeeth Dias).

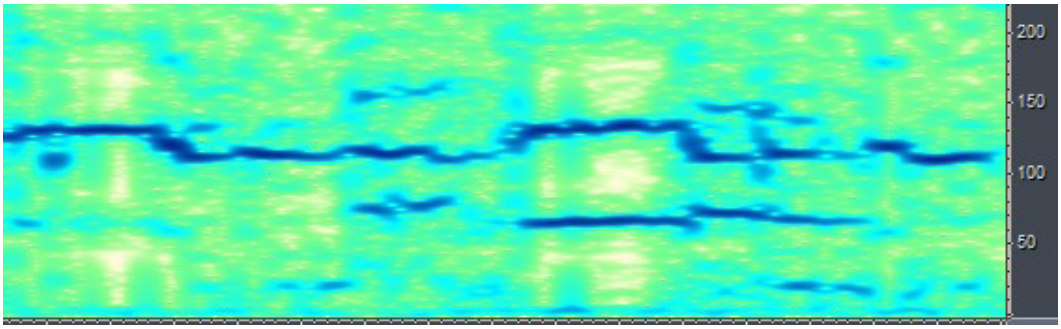

Fig. 12: Melodic movements in 63-64 bars (Excerpt of Joget Renung Renung played by Hamzah Dolmat, Resolution 16384, Time expanded ratio=25 percent).

Fast melodic movements can also be found in Joget Renung-Renung. They may remind to some Arabesk musical elements that dominate some traditional singing styles.

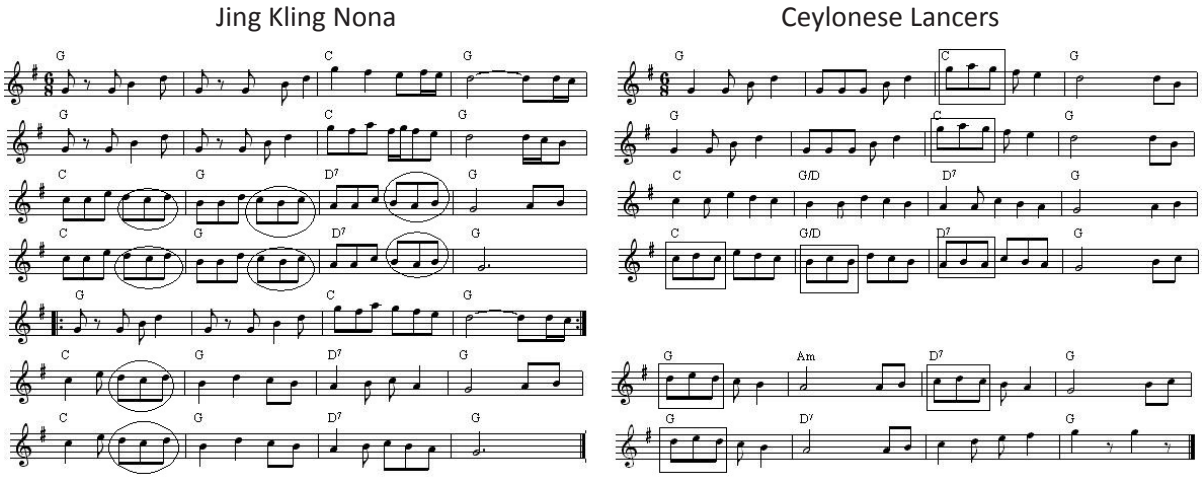

Fig. 13: Musical movements used in Branyo are mirrored in Kaffirinna: Jing Kling Nona, a Branyo song which popular among Portuguese community in Melaka, (transcription: Ruwin Rangeeth Dias) and second stanza of Sri Lankan Kaffirinna named Ceylonese Lancers composed by S. A. Norbert Rodrigo in 1929 (Ariyaratne, 1985: 101–102).

Malay musicians identify the Joget by its beat which they interpret as the 'same tempo' while Ceylonese identify Kaffirinna by the complexity of its beats, melodic movements and its mood. In the Joget ensemble, the violinist follows the singer using an idiomatic realization of the vocal melody. Ceylonese violinists do not do so. A good example to be compared is 'Ceylonese Lancers' and 'Jing Kling Nona'. The second segment of each bar in the third and fourth lines of Jing Kling Nona shows a specific melodic shape, while in the same third and fourth lines of the Ceylonese Lancers, the melodic shape is mirrored in the first segment of each bar.

	Jing Kling Nona					Ceylonese Lancers			
a	G		C	G	a	G		C	G
a	G		C	G	a	G		C	G
b	C	G	D	G	b	C	G	D7	G
b	C	G	D	G	b	C	G	D7	G
a	G		C	G					
a	G		C	G					
b	C	G	D7	G	c	G	Am	D7	G
b	C	G	D7	G	d	G	D7		G

Fig. 14: Harmonic scheme of Jing Kling Nona as Branyo and Ceylonese Lancers as a Kaffirinna

From the displayed scheme we can clearly see that the first four lines of both the "Jing Kling Nona" and "Ceylonese Lancers" are the same in chord progressions. If we analyse them melodically it is almost the same except the use of few modifications.

Summary

Violin and rebana are used for both Kaffirinna and Joget ensembles. However, the drum called “rebana” in Ceylonese context is actually similar to the Malay kompang. The first four lines of both the “Ceylonese Lancers” and “Jing Kling Nona” are similar in applied chord progressions. Although speculative at best, historically, African descendants likely had a role in playing music together with Portuguese settlers. Indirectly we may consider a mutual carry over and impact on Ronggeng and Joget. Portuguese people employed them as slaves and workers as Ariyarathne described for Ceylon.

	Kaffirinna Sri Lanka	**Joget Malaya/Malaysia**
Special places	coastal areas Modara, Moratuwa, Negombo, Putlam)	coastal areas Melaka / Penang
Purpose	instrumental music (can accompany dance [baila] or song [baila])	dance (sometimes with song)
Meter	mostly 6/8 (3+3/8), 3/4, 3/8, 2/4	2/4 (triplet and two 8th beats) (Ong, 2011: 154.)
Instruments used in ensembles before 1960	violin, mandolin, rebana[8], and guitar (Ariyarathne,1985: 118.)	violin, accordion, and rebana
Instruments used in present ensembles	violin, mandolin, guitar, tambourine, Congo drum, maracas, shaker, accordion, bass guitar, and piano.	violin, accordion, guitar, rebana drum, tambourine and the triangle. (Matusky & Tan, 2004:379)

Fig. 15: Sources and their practical features.

07. Rebana in Sri Lanka denotes a frame drum with nailed on skin similar to the Malay Kompang.

Ronggeng comprises more than only Joget, and if so, it is possibly a bit slower than modern Joget. Both in alternation and simultaneously, Joget emphasizes duple and triple beat divisions. This rhythm resembles that of many European 6/8 dances like the tarantella and the fandango; however, Joget, if notated, is commonly noted in 2/4 time. Another difference is that normally, Sri Lankan violinists play in free style and apart from the main melody of the song. While doing so, Kaffirinna violinists usually keep the violin differently, sometimes they move to the rhythm or with the dancers. Similarly, Malay Joget violinists occasionally move with dancers while playing in sitting or standing position resting the violin on the shoulder. In Kaffirinna ensembles, the violin is played in standing position as well. Joget violinists tend to play the singing melody without modifications, unlike Sri Lankan Kaffirinna violinists. An idiomatic realization of melody between singer and any melody instrument such as bamboo flute or string instruments is a common feature of many South East Asian performing arts.

According to Norihan’s typology (Norihan, Dias & Jähnichen 2014), there exist more than a hundred different Jogets in Malaysia including traditional, classic and modern. Similarly, even there are currently 18 basic Sri Lankan Kaffirinna melodies described in books, altogether with written, unwritten and modern Kaffirinna songs which try to imitate the mood of Kaffirinna songs, the total number of Kaffirinna melodies seems to be equal. In Sri Lankan Kaffirinna, gliding melodic movements used in violin playing, and also fast melodic movements

and chromatic progressions are used. While in Malaysian Joget, mostly only fast melodic movements are used in different ways. The question of how Malaysians typify traditional Joget and classical Joget as both Joget and Kaffirinna coming together with dance, movements, costumes, choreography and new trends, could be a further field of research in this aspect.

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Merleau-Ponty's Phenomenal Body and the Actor[1]

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01. Extract from chapter two of the PhD thesis 'Learning through the Bodymind: Phenomenology of an Actor's Experience' submitted to La Trobe University, Bundoora, Victoria.

The normal man and the actor do not mistake imaginary situations for reality, but extricate their real bodies from the living situation to make them breathe, speak and, if need be, weep in the realm of imagination.

Merleau-Ponty, Phenomenology of Perception

Abstract

This paper explores a short review of French Philosopher Maurice Merleau-Ponty's phenomenological philosophy to understand the non-dualistic nature of the actor's art. Derived from Edmund Husserl and Marin Heidegger, Merleau-Ponty provides a descriptive phenomenological account of how the human body functions as a consciousness in perception and action. His key notions of 'body-subject' and the 'operative intentionality' provide deeper reading onto how the actor functions within a fictitious context to engage with the environment and her onlooker.

Keywords: Merleau-Ponty, Phenomenology, bodymind consciousness, body-subject, operative intentionality

Introduction

I turn to phenomenology in order to theorise and articulate my experience of bodymind consciousness and acting practice. I am aware that there are many phenomenologists and different versions of phenomenolgies in current scholarship. Of these, I chiefly draw upon French philosopher Maurice Merleau-Ponty's (1908-1961) key ideas on the body as the most apposite and useful for understanding the actor's experience of bodymind in acting practice.

Phenomenology is known as a philosophy of the body (Langer 1989). Performers are, or aim to become, body-experts. Acting, as any other performance practice, is both a mode of being and an expression of the body. Both phenomenology and acting explore human perception, habituation and action, space and time and inter-human connection between bodies within certain social-cultural contexts. One pertinent distinction is that phenomenology theorises human embodiment in a philosophical manner, whereas the actor experiences this embodiment pragmatically in theatre. Daniel Johnston argues that actors are the users of their bodies, not only as a tool but as a

'whole of Being' (Johnston 2007: 11). Following Johnston, the practice of acting might be described as a personal way of 'doing phenomenology' via which, in this case, I try to bring my experience to the centre of this epistemological enquiry. Theatre practices have a 'deeply phenomenological concern' because theatre and the actor's craft is rooted in the 'concrete practice of lived experience' (Johnston 2008).

There are other encounters that have enhanced my understanding of acting and its relationship to bodymind practice. Acting theorist Phillip B. Zarrilli's works (Zarrilli 2002; Zarrilli 2012) have widened my understanding of body-mind[2] experience and how one's body-mind can be cultivated through an assiduous practice of somatic arts. Edward Shaner's book The bodymind experience in Japanese Buddhism: A phenomenological perspective of Kūkai and Dōgen (1985) explores the different stages of bodymind experience in daily life. Maxine Sheets-Johnstone (1963) and Jaana Parviainen's (1998) phenomenological descriptions of dance and Zarrilli's 'An Enactive Approach to Understanding Acting' (2008) have also been important influences and each of these will be cited in support of my predominant use of Merleau-Ponty and in the service of my articulation of bodymind consciousness that is the central concern of this article. Merlea-Ponty's phenomenal body prompts me to understand bodymind consciousness in key ontological categories: the lived body, lived spatiotemporality, and lived communion.

02. Zarilli uses the hyphen in body-mind to draw attention to the issue of divided consciousness.

Actor and the bodymind

Merleau-Ponty's Phenomenology of Perception is regarded as one of the most important works in phenomenological philosophy, first published in 1945. In this seminal work Merleau-Ponty presents his theory of perception mainly influenced by German Philosopher Edmund Husserl and Gestalt psychology[3] (Romdenh-Romluc 2010, pp. 4-5).

03. Gestalt theories were developed in Germany when Edmund Husserl was developing his phenomenological philosophy. Merleau-Ponty's theory on perception was developed in line with these Gestalt psychologists' works such as Max Wertheimer, Kurt Koffka and Wolfgang Köhler (Morris 2012: 21). Merleau-Ponty's analysis of perception is characterised by Gestalt psychologists' conceptualization of the figure/background structure of human experience (Landes 2013: 82).

As Romdehn-Romluc argues, Merleau-Ponty's phenomenological project asks a key question: 'how should we understand consciousness, the world and their relation'? His Phenomenology of Perception addresses these questions. He identifies the existing understanding as 'objective thought'. The objective thought comes in two modes: Empiricism (Realism) and Intellectualism (Idealism) (Landes 2013: 69; Luft and Overgaard 2011: 104-112). Merleau-Ponty criticises both empiricism and intellectualism on the ground that 'empiricism conceives of consciousness as just one of many things in a world that exists independently of it, and intellectualism, which conceives of consciousness as constituting the world' (Luft and Overgaard 2011: 104; Merleau-Ponty 2002). Merleau-Ponty's phenomenology proposes a new ontology, wherein consciousness and the world are 'mutually dependent parts of one whole' (Luft and Overgaard 2011: 104). He provides an investigation into this mutuality and argues that consciousness is embodied via human enactments in the world. Primarily based on Husserl's transcendental phenomenology,

Merleau-Ponty critiques the traditional notion of consciousness and its relation to a disembodied psyche.[4] In its place, he argues for the existence of consciousness in bodily 'operative intentionality' (Duffy 1992: 34). Merleau-Ponty writes: 'a corporeal or postural schema gives us at every moment a global, practical, and implicit notion of the relation between our body and things, of our hold on them' (1964: 5). Writing about this invisible relation of the body and the environment, he penetrates into an unknown region where the body is primordially connected to the world before the subject rationally perceives the world.[5]

Body-subject

Merleau-Ponty introduces the idea of the body-subject to understand the primordial nature of bodily existence in the world. This notion of the body-subject helps the actor to think through how his bodymind works as a primordial self within his practice and perceives knowledge through the synthesis of the bodymind. Merleau-Ponty argues that the body is a form of consciousness (Merleau-Ponty 2002), an idea that illuminates how the bodymind plays a dominant role in the actor's engagement with the enactment. Merleau-Ponty's understanding of the body critiques traditional ontological understandings of the body and its function in the process of knowing. Traditionally, the body has been understood as a combination of subjective and objective elements, but Merleau-Ponty theorises the body as neither biological object consisting of internal organs, legs, arms and a trunk nor spiritual subject without any physical elements. Edmund Husserl (1859-1938) provides two sets of words to denote the existential nature of the body. The German word körper connotes the physical body as object. The term Leib is used for the lived or living body: this is the body as subject. Generally, the phrase 'lived body' presents the body as a non-dualistic, sentient being in contrast to the Cartesian split of body as a machine and the mind as an extended rational soul. The main difference between the lived body and the physical body is that this lived or animated body is always given as my own body (Crisis §2) and I experience myself as 'holding sway' over this body. The lived body is not just a centre of experience, but a centre for action and self-directed movement (Moran and Cohen 2012: 193-194). What, then, is the body? The body is nothing but me; the body I experience or simply 'I am my body'. Merleau-Ponty calls this body the 'I-body' or the 'natural I' (Kwant 1963: 28). He introduces another word, 'praktognosia' (Merleau-Ponty 2002: 162) to denote that human understanding is 'wholly submerged in action' (1963b: 28) and, further, that:

> Our bodily experience of movement is not a particular case of knowledge; it provides us with a way of access to the world and the object, with a 'praktognosia', which has to be recognized as original and perhaps as primary (2002: 162).

The body-subject is the primordial knowing and meaning-making agent, which is tied simultaneously to the body itself and to the world. This knowing process occurs in between the body and the

04. Merleau-Ponty, in his preface to Phenomenology of Perception (2002), indicates his major influences. He indicates how Husserl's philosophy springs other key figures such as Heidegger and his debt to Husserl's findings (2002: viii). Furthermore, he mentions other theorists and philosophers who have also been phenomenologically important and have practised phenomenological ways of thinking. He notes Hegel, Kierkegaard, and even Karl Marx, Nietzsche and Sigmund Freud (ibid: viii) as phenomenological thinkers who have been practising 'a style of thinking' which resonates phenomenological approaches before the phenomenological tradition has formed into compre hensive philosophy (ibid: viii).

05. Merleau-Ponty's philosophy and Japanese philosophers such as Yuasa Yasuo, Ichikawa Hiroshi and Dōjen share common themes in relation to analysis of the body-subject. They have all attempted to understand the human body as an integrated wholeness. Merleau-Ponty's idea of body-subject as a pre-conscious existence has influenced Yuasa's Yasuo's analysis of the body-schema. For instance, Yuasa's body scheme consists of four circuits. These four circuits are analysed as the experiential body or the subject- body (Nagatomo 1992, pp. 59-76). Moreover, these circuits are related to the physical aspects of body that is the object-body (body with senses).

world within a pre-conscious realm: thus, the body-subject and the world are mutually dependent.[6] This level of the body does not generate meanings in the psychological realm but it 'is born at an organic level that is pre-personal, which is thence modulated through one's bodily engagement with the intersubjective world, engendering a complex personal relation to the world' (Diprose and Reynolds 2008: 114).

The primary goal of the actor, whether she performs in Anton Chekhov's Uncle Vanya or Sarah Kane's Psychosis 4:48, is the need to find the 'knowing how' – how to enact the situations. Therefore, the actor is not a thinker at the primary level but a doer; a doer of actions in theatrical situations. However, the actor is a thinker too, but a 'thinker in movement' in a phenomenological sense (Sheets-Johnstone 1981). The actor's actions always begin with the 'I can' of the body. Merleau-Ponty adapts this terms 'I can' from Husserl. It is a way of describing how the body attunes through action to its environment. It implies that it is not because 'I think', that I therefore engage with the world; it is because my animated body can pre-reflectively engage and make meaningful relationships with the world (Landes 2013: 102). Actors move, think, talk, sing, act and interact with others. All these activities stem from the actor's bodily urge of 'I can' (I can think, I can imagine, I can sing, I can jump, I can dance, I can touch). For Merleau-Ponty, this 'I can' functions as the primary knowing agent of the body. He argues: 'Consciousness is in the first place not a matter of 'I think that' but 'I can'' (2002: 159). It is the body that functions as a consciousness to achieve the desired tasks. Merleau-Ponty's concept of body-subject therefore incarnates as consciousness through the 'movement intentionality' (motor intentionality) of the body. Also in support of this notion, and offering a further rejection of Cartesian epistemology and ontology represented by 'I think,' Elizabeth Grosz asserts that 'the body is my being-in-the-world and as such is the instrument by which all information and knowledge is received and meaning is generated' (1994: 86).

Merleau-Ponty identifies the body-subject with a particular metaphor, the Nullpunkt, a German word indicating the zero point (Priest 1998). As a measuring instrument cannot measure itself, the body-subject exists and functions as a zero point. As Stephen Priest points out, this body-subject does not, therefore, appear to itself as an object (Priest 1998: 72). Being a perceiver, the body-subject cannot perceive itself: the body-subject can see, but it cannot see itself seeing or see its own seeing. This positioning of body-subject as a Nullpunkt has given the body-subject its inherent ontological being as a flesh in the world: 'My body is made of the same flesh as the world because both body and the world are perceived' (Priest 1998: 73-74).

06. Similar to Merleau-Ponty, the Asian philosopher Yuasa introduces the body that is psychophysical in content and is understood as a unified wholeness. Yuasa's body scheme as a new 'somatic self' functions as an epistemological as well as actional centre embodied by a person. This 'somatic self', as per Merleau-Ponty's lived body, 'opens its windows both outward onto the external physical nature and inward into the internal region of the psyche' (Shaner1989: 141).

The body as a nullpunkt or zero point in the perceptual act has implications for the actor (Parviainen 1998). The actor always confronts with his body. Nevertheless, he cannot say that 'my body is my instrument,' because if he understands his body as his tool, it imposes an unchanging stable entity of 'I' which exists and overrides his body as an object of his attention. He gradually learns that the actor's body is a mode of living and the maker of meanings that works simultaneously as a perceiver and a perceived. This intersubjective negotiation between the actor's body and how it is perceived is always a concern in an actor's learning situations. When the actor prepares for a performance she is always confronted with an 'abyss' (écart) (Parviainen 1998) between her perceiving and how the other (role / director / actors / audience) perceives her body. Jaana Parviainen argues, 'The sentient body is interwoven with perceivable, sensible objects, but the body and objects do not vanish into "sameness"' (Parviainen 1998: 64). Thus, because the perceptual act always instigates a counter perception such as seeing and seen, touching and touched, this reciprocity creates a gap between the body and the object perceived (1998: 65).

As the layman cannot see his seeing, the actor cannot fully grasp the ways the body is presented and received on stage. There is always a gap between what the actor perceives of his body and how the audience perceive his body. As Merleau-Ponty states, 'I am always on the same side of my body; it presents itself to me in one invariable perspective' (Cited in Parviainen 1998: 88). The actor confronts a complex situation when she perceives her body, her art and craft as undivided and interdependent operations. She knows that she cannot step out from her body and say 'I am presenting my art', and neither can she assume that 'I create my craft out of my body and offer my product to the onlookers'. Every time she tries to do so, she is simultaneously being bonded with her bodymind not allowing her to depart from its equilibrium. Her art is nothing but herself; her artistic product is herself, her bodymind. She cannot see her artwork unless via other duplications or representations in other forms or mediums and even these entail inevitably distorting mediations. However, she possesses a privileged position of being the 'zero point' (écart) or abyss in her art. She can experience the privilege of living through it and part of her role as an actor is to reveal as much of that sense of privilege to the audience as she is able.

I can see other objects around me; I can handle them, use them and even walk around them. But as Merleau-Ponty asserts, it is my body that cannot be perceived similar to my other observations. He writes: 'In order to be able to do so, I should need the use of a second body which itself would be unobservable' (2002: 104). Unlike other objects, he distinguishes bodily existence as a conscious subject via which the body is able to perceive, feel, touch, and see things. He further writes, 'it is neither tangible nor visible in so far as it is that

which sees and touches' (2002, p. 105). The actor, however, uses something akin to a second body. That second body – most obviously, in the enactment of a dramatic character – is developed through the cultivation of a second nature, itself a result of the highly attuned body schema pertaining to a particular task or an action. It is where the actor's sensory perception, imagination, thinking and bodily actions are integrated within the core of her habit body. Where body-subject refers to Merleau-Ponty's description of the body as an undivided consciousness, the body schema is a development of this idea that specifically refers to the indivisibility of perception and motility.

Conclusion

This review of Merleau-Ponty's phenomenology provides a new way of looking at the actor's art. The actor's work has always been understood in Western pedagogy as a split of body and mind. The actor's consciousness is something separated from the body and body always follows what the conscious mind tells to perform. This 'idea-response' model in the Western theatrical pedagogy has been predominant in understanding the actor's art as inner or outer work. However, phenomenological philosophy of Merleau-Ponty and his compelling account of human body and perception further provide tools to unveil the complex structures of bodymind in the actor's art.

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A Literature Review on the topic of the Influence of Informal Support on Family Interference with work conflict

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Abstract

This mini literature review focuses on the influence of informal support on family interference with work. In Eastern countries like Sri Lanka, informal support receive in the form of grandparents and relatives will play a major role in reducing family interference with work conflict of dual earning couples. The structure of review is as follows. The first section will focus on the definition of work family conflict. After that the antecedents and outcomes of Work family conflict is explored. This will be followed by a discussion on the role of work related support in work family conflict. Finally the influence of informal support in family interference with work conflict will be discussed.

Key words: work family conflict, work interference with family, family interference with work, literature review, social support, informal social support

Introduction

Work family conflict

With the increase of more women entering the workforce resulting more dual – earner couples the topic of work family conflict becomes an important issue. Work family conflict (WFC) is commonly defined as 'a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect so that participation in one role is more difficult because of participation in another role' (Greenhaus & Beutell 1985). According to these researches, there are three major forms of work –family conflict: time based conflict (i.e. the time spent in paid work is not available to meet family demands resulting less time available to perform family duties and maintain family relationships), strain based conflict (e.g. effects of work demands are transmitted to family through psychological spillover) and behavior based conflict (e.g. where in- role behavior in one domain is incompatible with role behavior in other domain).Recent research in this area recognized that relationships between work and family are bidirectional; work interference with family (WIF) and family interference with work (FIW). Previous studies revealed that there is a positive relationship between three major forms of demands; time based demands, strain based

demands and behavior based demands with WFC and work demands were related positively to WIF and job dissatisfaction, while family demands were associated with FIW and reduced family satisfaction (Voydanoff 2005; Greenhaus, Parasuraman & Granrose 1992).

Contrary to the conflict perspective, Greenhaus, Collins and Shaw (2003) took a different approach when defining work family balance as 'the extent to which an individual is equally engaged in - and equally satisfies with - his or her work role and family role'. This definition recognizes that balance be either positive or negative. Moreover they operationalized the concept of work family balance as comprising three factors; time balance, involvement balance and satisfaction balance. More specifically this study investigated the relationship between work life balance and quality of life based on a survey of 353 professionals employed in public accounting. Results showed that quality of life is highest for individuals who are more engaged or satisfied in family than work and least for who more engaged with work than family. Surprisingly the quality of life of balanced individuals fell in-between these two extremities. Recently Greenhaus and Powell (2006) developed Work-Family Enrichment' (WFE) theory, defining work-family enrichment as 'the extent to which experiences in one role improve the quality of life in the other role' whereby quality of life can be captured by high performance and positive affect. Further this definition emphasizes and recognizes the positive effects of work to family role spillover, indicating that work and private life can be benefited from each other. In another research Friedman and Greenhaus (2000) identified three critical dimensions that determine whether work and family are allies or enemies; the specific experiences encountered in a role, the level of involvement invested in a role and attitudinal reactions to participation in a role. It is practical to view life as not balancing the two domains all the time but prioritizing and integrating two domains whenever necessary.

Antecedents and outcome of work family conflict

Since this study examine WFC in terms of the domain- specific conflict of family interfering with work (FIW), this literature review is focused mainly on antecedents related to FIW/ family domain.Numerous studies haveexamined the antecedents of FIW.The available literature suggest that WFC is higher among those who have children at home, are concerned or troubled about child care, have disagreements, tension or stress with their family or spouse, are highly involved in family, have greater time demands from family and have less family support(for review see Eby,Casper, Lockwood, Bordeaux & Brinley 2005; Byron 2005).In terms of big 5 personality dimensions it is found that neuroticism related positively to both WIF and FIW conflict and extraversion related negatively to WIF conflict (Eby et al. 2005).Most scholars agree that demographic variables (material status, parental status and gender) are significant moderators of many work domain/ WIF and family domain/FIW relationships (Carlson &Perrewe 1999; Eby et al. 2005). There is mixed evidence whether there is gender differences in WFC and some research finds no gender differences, whereas other studies find that women report higher levels of some

dimensions of WFC (Eby et.al, 2005; Byron 2005). At the cultural level, it is highlighted that American employees reported greater family demands than Chinese employee and family demands had a greater effect on WFC among Americans whereas work demands had a greater effect on WFC among Chinese workers (Yang 2000).

Empirical evidence supports that WFC have negative effects on general health and wellbeing of individual employees. WFC has been shown to have negative effects on individuals (e.g. life dissatisfaction, depression, substance abuse, and guilt), families (e.g. marital dissatisfaction, crossover effects) and organizations (e.g. absenteeism, turnover, burnout, job dissatisfaction) (Ebyet al. 2005: Greenhaus, Parasuraman & Granrose 1992).

One way research has shown to reduce work family conflict of an individual is through social support. Stress researches have emphasized the importance of social support as a coping resource in dealing with stressors in different life domains (Greenhaus & Parasuraman 1985; House 1981). Further House (1981) shows that support can enhance health and wellbeing directly, regardless of stress levels.

Social support

Social support has been defined as the availability of helping relationships and the quality of those relationships (Leavy 1983; cited in kailasapathy, Kraimer & Metz 2014). House (1981) argue that social support is an interpersonal transaction that involves emotional concern, instrumental aid, information or appraisal. The available research evidence suggest that support from a source relevant to the domain in which the stressors are experienced is more beneficial than support from other sources and this concept is further supported by a study carried out by Parasuraman, Greenhaus and Granrose in 1992. In their study among 119 dual career MBA couples fromfour east coast universities demonstrated empirically that work related wellbeing is affected primarily by work support, while familial wellbeing is affected more by sources of support in the family. Therefore social support indirectly decreases WFC through reduced perceived role stressors and time demands. Similar findings have been reported by Carlson and Perrewe (1999). Further the results of this study viewed social support as an antecedent to perceived role stressors and time demands. In another study Abendroth and Den Dulk (2011) found that social support has a direct and buffering effect on work life balance satisfaction.

Types of social support

Sources of support can range from informal (family and friends) to professionals or semi-professionals who offer special services (House 1981) and sources of support can be found at the private level (family and friends), the workplace level and the national level. For example, at the national level public policies such as publicly funded childcare, statutory leave provisions or policies regarding flexible working practices are the sources of support. Workplaces may offer flexitime benefits, child care facilities, working from home and at private level a partner and relatives can help with household duties (Abendroth & Den Dulk 2011).

Besides distinguishing between different sources of support, the existing literature distinguishes different types of support as emotional, instrumental,and informational and appraisal support. Emotional support consists of feelings of trust and love, instrumental support includes resources such as spending time with someone, or providing him or her with materials and money. Informational support is providing someone with information or advice and appraisal support is providing evaluative feedback to others. (House 1981). Employer work life policies can be seen as instrumental support whereas the emotional support can arise from both supervisor and colleagues. In the private domain emotional support may come from the family, relatives and neighbors or as the form of instrumental support from the domestic help (Abendroth& Den Dulk 2011).

Work related social support

Social support in the work domain may comes from coworkers, supervisors and supportive work family culture. Research suggests that availability of instrumental supportat the organizational level can reduce the stress associated with balancing multiple roles (Thomas & Ganster 1995) but it was found that many employees are not taking advantage of these benefits. In order to understand this situation a group of researches carried out a research with 276 managers and professionals and they have defined supportive work family culture as the shared assumptions, beliefs and values regarding the extent to which an organization supports and values the integration of employee's work and family life (Thompson, Beauvais & Lyness 1999). They have developed a measure of work family culture by identifying three components of work-family culture that integrate to reflect the overall supportiveness of the work family culture; organizational time demands or expectations that employees prioritize work over family, negative career consequences associated with utilizing work family benefits and managerial support and sensitivity to employee's family responsibilities.

This study further indicate that supportive work family culture was related to greater affective commitment, less intension to leave the organization and higher utilization of available benefits. In addition to family supportive policies and family supportive supervisors

perceptions that employees form regarding the extent the organization is family supportive; family supportive organization perceptions (FSOP) play a role in determining the usage of family- friendly benefits by employees (Allen 2001). The employees who perceived that the organization was less family supportive experienced more work family conflict, less job satisfaction, less organizational commitment and greater turnover intentions than employees who perceived that the organization was more supportive (Allen 2001). Therefore, the availability of family friendly benefits might be indirectly related to work life conflict through the perceived family supportiveness of the organization. Similar findings was found in Sri Lankan context also. This study was replicated in a sample of 50 dual career couples in selected private sector banks in Colombo District found that by perceived organizational support for work life balance was positively correlate to positive job outcomes as job satisfaction, organizational commitment and organizational citizenship behavior (Suranji and Thalagaspitiya 2016).

Research consistently shows that a supportive relationship with one's supervisor is associated with diminished WFC and positive work-life outcomes. For example it is demonstrated that employees were less likely to experience work-family conflict if their supervisors supported their efforts to balance work and family needs (Thomas and Ganster 1995). Most scholars agree that both supervisors and coworkers play a role in reducing WFC. It is showed that social support from supervisors and coworkers reduced work role conflict, role ambiguity and resultant WFC (Carlson & Perrewe 1999). Major et al. (2007) have empirically examined the relationship between work family culture, supportive work place relationships and WIF. In a path model tested with 1380 IT employees from 11 organizations demonstrated that work family culture indirectly related to WIF through supportive work place relationships (supervisor and coworker support). Specifically, high leader member exchange (LMX) and coworker support were both associated with reduced WIF. And also it is suggested from this study that supportive supervisors may model and encourage supportive behaviors among coworkers. Leader member exchange is defined as the quality of the relationship shared by a supervisor and a subordinate and LMX theory explains that employees get different treatment from their supervisors based on their quality of relationship (Dienesch and Linden 1986) . In addition to this, employees with high LMX relationships enjoy both instrumental and emotional support from the supervisors reducing the likelihood of WIF (Dieneschand Linden 1986; Carlson and Perrewe 1999). It is identified that leader member exchange has negatively relates to WIF (Kailasapathy 2014; Major et al. 2008).

Abendroth and Dulk (2011) have investigated the role of social support in the work life balance satisfaction at national, workplace and private level. They conducted a cross sectional study with 7867 service sector workers in eight European countries. The results suggest that instrumental support in the work place is not enough to achieve a successful work life balance and both instrumental and

emotional workplace support is needed for a high level of work life satisfaction. In the absence of a cultural and legislative framework supportive of equal opportunity, it is less likely that organizations operating in Eastern societies have work- family friendly policies. as a result, in Eastern countries, supervisor's support is critical in reducing the WIF of employees (Kailasapathy 2014). It was found that there is a three way interaction such that a spouse's gender role orientation moderates the relationship between leader-member exchange and WIF differently for men and women. As this study have shown for the men LMX negatively related to WIF conflict only when their spouses had non- traditional gender orientation and for women depending on the spouse's gender role orientation the relationship between LMX and WIF may be negative or positive (Kailasapathy 2014).

Non work related social support

This represents the social support from spouse and family, relatives, grandparents and paid domestic help. Spouse support is a source of non-work support that has received a great deal of attention in the literature. Most scholars agree that there is a cross over effect of stressors, strain and depression encountered by one partner on the wellbeing of his or her spouse (Parasuraman & Greenhaus 1992). Studies have investigated the positive outcomes of spousal support. For example, Friedman and Greenhaus (2000) argued that psychological support from spouses provide information, guidance and acceptance that help partners self-esteem and confidence that increases one's capacity to better cope with work-family issues. Research indicates that although men and women reported receiving similar levels of support from their spouses, the spouse support plays a more important role in the family satisfaction of women than in men (Greenhaus & Parasuraman 1992). However, this finding has been challenged by a study conducted by a Sri Lankan researcher who found that the relationship between partner support and work family balance is stronger for men than for women highlighting that men perceive higher partner support than women (Arachchige 2013). The reason for this is, in Eastern countries like Sri Lanka, majority of the household and child care responsibilities are bared by women which was revealed by (Kailasapathy et al. 2014).

In one study conducted by Gunawardena, 2014 with 150 valid responses from corporate sector managers revealed that childcare responsibilities have not been significantly affecting work life balance. The reason for this may be the availability of extended family support in Sri Lanka in the form of parent support and relatives. Due to this, the working couple do not perceive childcare responsibilities negatively. This study supports the arguement that informal support plays a significant role in reducing WLC in Eastern countries like Sri Lanka. However there is a gap in the emprical knowledge available, especially in Sri Lanka, with regard to the role of informal support in work life conflict in dual earning couples.

Moreover, Abrendoth and Den Dulk (2011) found a negative relationship between informal and paid household help and work life balance satisfaction. This is because in Western countries domestic responsibilities considered as individual responsibilities and people only sought for help when problems occur. But in Sri Lanka this relationship may be positive when both parents participate in the labour market, relative care appears to be the most popular alternative and among relatives grandparents are preferred the most (Brandon 2000; Wheelock and Jones 2002).

Conclusion

Research on the work-life interface has so far focused mainly on predictors and consequences of work- family conflict. And also most of the studies which focuses on social support only investigated one aspect of support: support from the spouse and/or organizational support. Studies rarely indicate informal help from relatives and friends or paid domestic help, even though people often use a combination of formal and informal support. Therefore this study hopes to explore the role of informal support in reducing work life conflict. Further, this study also hopes to investigate whether support from grandparents relate to job satisfaction or family satisfaction and the type of support given by grandparents (emotional, instrumental aid, information or appraisal) and also the effects of demographics of grandparents (age, gender, education etc.) in reducing WLC.

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