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Use of Dichotomous Choice Contingent Valuation Method to Value the Manukan Island, Sabah

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ABSTRAK

Kajian ini menerangkan penggunaan kaedah penilaian pilihan dikotomous kontingen (CVM) untuk menilai sumber rekreasi luar di Pulau Manukan, Sabah. Kedua-dua model logit dan probit adalah digunakan untuk menganalisis data primer yang diperolehi melalui temu duga peribadi. Penganggaran kebolehdan maksimum bagi model ini menunjukkan pendapatan dan harga adalah pembolehubah yang signifikan dalam menentukan kesanggupan membayar (WTP) seseorang. Nilai WTP yang diterbitkan semasa yang dikenakan kepada pengunjung. Kajian ini juga menganggarkan hasil boleh dijanakan iaitu yuran yang dikenakan menurut rangka kerja WTP.

ABSTRACT

This study presents the application of dichotomous choice contingent valuation method (CVM) to value outdoors-recreational resources in Manukan Island, Sabah. Both the logit and probit models are used to analyze the primary data obtained through personal interview. The maximum likelihood estimates of this model show that income and price are significant variables in determining one is willingness to pay (WTP). The WTP figure derived from the model shows that it is much higher than present fees charged to the visitors. This study has also estimated the revenue that could be derived if the fees were charged according to the WTP framework.

INTRODUCTION

While much economic activity is organized through the private market in which competitive forces determine prices, most of the recreational parks exist as public property because of their non-rival consumption and non-exclusion in nature. If there are some fees charged to it, it is insignificant compared to the utility obtained. The existence of public goods creates problems for a price system, as once a public good is produced, a number of people will automatically benefit regardless of whether or not they pay for it. The designations of parks as public good

create free riders and over-usage problems. This could lead to deterioration in its quality. In tandem with the concern of quality environment, the subject of user fees in the management of national parks and protected areas has received increasing interest in the literature (Ana 1988; Leuschner *et al.* 1987; Lindberg and Huber 1993 Rosenthal *et al.* 1984).

The cognizance of charging fees for the utilization of parks should be given special attention in developing countries as government funds are typically in short supply, and enforcement of environmental regulations lax or nonexistent.

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The majority of the visitors are foreign tourists who incur few of the costs but enjoy many of the benefits stemming from resource conservation efforts. Charging of fees could allow a certain degree of the market system to function, absorbing part of environmental costs.

The potential benefits from charging user fees and differentially pricing access to national parks are significant. As charging fees could lead to a more optimal market (Dixon and Sherman 1991) it could provide the vehicle for capturing benefits of ecotourism which often accrue primarily to the private sector. It can also reduce visitation in areas that suffer from overuse and accompanying ecological damage. Using Manukan Island in Tunku Abdul Rahman Park, Sabah, this paper applies a Contingent Valuation Method (CVM) to access the net economic values of recreational resource in Manukan Island.

This paper is organized into five sections. Section two describes the location of study. Section three explain the methodology and source of data used in the study. Empirical result are presented in Section four while the last section offers some discussion and concluding comments with regard to nonmarket valuation work in this country.

LITERATURE REVIEW

Considerable research has established the CVM as a sound technique for estimating values for public policy decisions. Some example of these studies are Rendall *et al.* (1974), Bishop and Heberlein (1979), Bishop *et al.* (1983), Hanemann (1984), Sellar *et al.* (1986), Abala (1987), Cameron and James (1987), Bowker and Stoll (1988), Cameron (1988), McConnel (1990), Balderas and Laarman (1990), Donaldson *et al.* (1997), Rollins (1997), Rayn (1997), Willis and Powe (1998), Hayes and Hayes (1999), Carlson and Johansson-Stenman (2000), Shackley and Dixon (2000), Loomis *et al.* (2000), and Scarpa (2000), just to name a few.

Most Malaysian cases on environmental valuation have applied the Travel Cost Methods (TCM) to estimate the benefits of nature-based recreation - for instance, Shuib (1991), Willis *et al.* (1998), Jamal and Redzuan (1998), Jamal (2000). There have been fewer published studies of a CV application: Nik Mustapha (1993), Alias *et al.* (2002), Alias and Ruhana (2003) and Jamal and Shahariah (2003) employed the dichotomous choice and open-ended CV formats to estimate

the benefits of a lake recreation and non-use values of forest resources, respectively.

Nik Mustapha (1993) carried out a study at Tasik Perdana recreational area in Kuala Lumpur using the dichotomous choice contingent valuation method. Both the logit and probit models are used to analyze the data and the maximum likelihood estimates of these models are encouraging. The consumers' mean and median willingness-to-pay were computed. The mean willingness-to-pay ranged from RM84 to RM106 from both models while the median WTP ranged from RM109 to RM36. Median WTP measures are argued to be more robust than the mean WTP, and in this study he concluded that the median WTP figure for the outdoor recreational resources in Tasik Perdana recreational resources in Tasik Perdana is about RM36.

Alias *et al.* (2002) conducted a study of willingness of Local Tourists to Pay for Conservation of Tourism Sports in the Damai District Sarawak. The study applied the dichotomous choice of Contingent Valuation Method (CVM), to visitors sampled randomly. Results indicated a per person median value of RM11.64 WTP for the preservation of Damai, using the logit model. The amount could be collected by dividing the whole Damai resort into specific areas (e.g. beach, mangrove swamp, mountain range, etc.). The current environmental condition in Damai is still pristine and undeveloped (the mangrove swamps, beaches, and mountain treks), as it has yet to be fully developed into a tourist attraction. As such, each individual area of interest could be developed accordingly with the level of WTP as indicated in this study.

Alias and Ruhana (2003) apply the dichotomous choice CVM to the outdoor recreational resources of the Malaysian Agricultural Park, Bukit Cahaya Sri Alam, Selangor. Both the logit and probit models are used to analyze the primary data obtained from personal interviews. The maximum likelihood estimates of this model show that income and price are significant variables in determining one's WTP. The WTP figure derived from the model shows that these were much higher than present fees charge to the visitors. The calculated premium mean WTP using the logit model ranged from RM3.85 to RM6.29 for single respondents and, for the marriage respondents from RM2.84 to RM4.80 based on 95.7 percent confident interval, with mean premium value of RM4.87 and RM3.61, respectively.

Jamal and Shahariah (2003) applied the Dichotomous-Choice Contingent Valuation Method on Paya Indah wetlands in Kuala Langat, Selangor to estimate the non-marketed benefits of conserving the wetland from the perspective of non-users, in particular among urban households in Selangor. Results indicate that the mean willingness to pay (equivalent surplus) which reflects the non-use values of Paya Indah wetlands accrued to urban non-user households in Selangor ranged from RM28 – RM31 annually. The large sum of monetary value that households place for the conservation of Paya Indah illustrates partially the magnitude of social benefits that society at large obtains from the assurance that the wetland is to be maintained as a site for nature. This strongly indicates that conservation of the wetlands is highly valued by the general public.

LOCATION OF THE STUDY

The Tunku Abdul Rahman Park lying from 3 to 8 kilometers off Kota Kinabalu, comprises five islands covering an area of 4,929 hectares. Tourists and divers are attracted to the park because the islands namely Pulau Gaya, Pulau Manukan, Pulau Mamutik, Pulau Sapi Pulau Sulug are surrounded by clear waters and coral reefs.

Pulau Manukan is a boomerang shaped island covering an area of 51 acres. It is the second largest island of the Tunku Abdul Rahman Park and has good stretchers of beaches on the southern coast line. The island is ideal for diving and swimming. Among the facilities available on the island are chalets, clubhouses, restaurants, diving centers, pools, football fields, and squash/tennis courts. Other infrastructural support such as water, electricity, desalination plant, sewerage system and a solar-powered public telephone are also provided. The best reefs are just located around the island and are exposed during low tide.

METHODOLOGY AND SOURCE OF DATA

Following recommendations from environmental literature (Arrow *et al.* 1993), the closed-ended (CE) WTP approach to estimate the benefits from the preservation of the Manukan Island was used. Individuals were asked whether they would pay specific additional fees for a given commodity, with possible responses being "YES" and "NO". The bid amount is varied across respondents and the only information obtained

from each individual is whether his/her maximum WTP is above or below the bid offered.

Logistic regression technique were used to estimate WTP (Hanemann 1984). Using this approach, the probability of saying "YES" to a bid at different levels of the independent variable is estimated as:

$$P = (1 - e^{-x})^{-1} \quad (1)$$

where x is estimated regression logit regression equation and P is the probability of accepting the price. Mean WTP is estimated as the area under this probability function. This area shows the proportion of the population who would consume the good at each price level, and their associated utility. The area under the curve is estimated by integration techniques and can be expressed as:

$$E(WTP) = \int_L^U (1 + e^{a+bPRICE})^{-1} dPRICE \quad (2)$$

where $(1 + e^{a + bPRICE})^{-1}$, is the probability of saying "YES" and U and L the upper and lower limits of the integration respectively.

Estimating mean WTP within this framework relies on making some assumption about upper and lower limits of the integral, i.e. knowing the price amounts at which the probability of saying "NO" is zero and the probability of saying "YES" is one. Applying this to Manukan Island, and assuming that individuals will not pay if they receive a disutility from it, negative WTP can be ruled out and zero used as the lower limit. Bishop and Heberlein (1979) and Sellar *et al.* (1985) used the upper range for the integration of their price amounts as the upper limit for the integration. Hanemann (1984) argued that such an approach makes assumption about the probability distribution for the unknown WTP in the sample. He argued that the upper limit should be infinity and that using the highest offered amount may be a poor approximation of the mean utility estimated when integrating between zero and infinity. In this study zero was chosen as the lower limit of the integral and maximum value as the upper limit. Confidence interval of WTP was also calculated using the variance-covariance matrix and a technique adopted for dichotomous CVM by Park *et al.* (1991).

For the purpose of this study, primary data were collected through interviews by means of questionnaires. A total of 180 domestic visitors

TABLE 1
Socio-economic characteristic of respondents

	Frequency	Percent
Gender		
Female	98	54.44
Male	82	45.56
Origin of tourist		
Kota Kinabalu	122	67.78
Other Sabah area	20	11.11
Sarawak	4	2.22
Peninsular Malaysia	11	6.11
Foreign tourist	25	13.89
Age distribution		
Less than 25 years	74	41.11
25-34 years	70	38.89
35-44 years	21	11.67
More than 44 years	15	8.33
Marital status		
Single	111	61.67
Married	69	38.33
Race		
Malay	36	20.00
Chinese	11	6.11
Indian	3	1.67
Other bumiputera	105	58.33
Other race	25	13.89
Education level		
Primary school	4	2.22
Secondary school	83	46.11
College and university	93	51.67
Family members		
Less than 5 persons	120	66.70
6 - 10 persons	56	31.10
More than 10 persons	4	2.20
Job category		
Professional	30	16.67
Administrator	14	7.78
Clerical	14	7.78
Services sector	60	33.33
Others	62	34.44
Income level		
Less than RM500	63	35.00
RM501-RM1000	50	27.78
RM1001-RM2000	40	22.22
More than RM2001	27	15.00

were interviewed and only 160 are used for the purpose of this analysis because of missing values. Information on socio-economic characteristics of respondents obtained included race, origin, age, marital status, education, size of family members, occupation, monthly and supplementary gross income (Table 1). Visitors at Manukan Island were asked to answer the questionnaires at the chosen location. Each of the respondents was given the details on the purpose of

preservation of the island, facilities available and format used in Contingent Value techniques. Respondents were asked the following question and required to respond either 'Yes' or 'No':

If entrance fees are increased by RM x, would you willing to pay so that you could have continued to use this recreational area?

Where x ranged from RM1.00 to RM10.00, it represents a 'reasonable' additional amount

of entrance fee to many privately managed recreational areas in Sabah. The ability to seek willingness to pay is represented by the dichotomous variable of WTP with values of 1 for those willing to pay the additional amount of entrance fee and 0 is otherwise. An OLS regression of the above relationship with WTP as the dummy variable is beset by several problems namely: (1) non-normality of the error term, (2) heteroscedasticity, and (3) the possibility of the estimated probabilities lying outside the 0-1 boundary (Gujarati 1988). Since the dummy WTP is actually a proxy of the the actual propensity or ability of willingness to pay, the probit and logit models guarantee that the estimated probabilities lie in the 0-1 range and that there are non-linearly factors related to the explanatory variables. The difference between these two approaches are mainly in the distribution of the regression error terms. The logit approach assumes that the cumulative distribution of the error term is logistic while probit assumes that is normal.

RESULTS AND DISCUSSION

An initial estimation of the model using all the socio-economic characteristics as independent variables reveals that all variables are insignificant except for income and price (refer to Table 2).

The maximum likelihood estimates of the specification for logit and probit models are estimated using Shazam, version 7.0 and the means of WTP are calculated using MATEMATICA, version 2.2 (Sherlock 1993). The results are given in Table 2. The chi-squared statistics shows that the model is highly significant. The value of adjusted McFadden's pseudo R^2 is 0.0982 and 0.0980 for logit and probit models, respectively. The percent of right prediction is 62.92 percent for both models. The price and income in both models are significant at one-percent level. The result also shows the logit and probit models differed little in terms of summary statistics. This corresponds with prior work in which neither model dominated the other empirically in the binary dependent variable case (Bowker and Stoll 1988).

Based on the estimation results, equivalent WTP measures were calculated using logit and probit models at income level (Table 3). The calculated mean WTP ranged from RM3.99 to RM6.14 for the logit model, and for the probit model it ranged from RM4.34 to RM5.69 based on 95 percent confident interval. As shown in Table 1, the logit model performed slightly better than probit model both in terms of percent correct prediction and McFadden- R^2 . In the light of this the mean WTP obtained from the logit

TABLE 2
Parameter estimates for dichotomous choice model for Manukan Island, Sabah

	Logit Model	Probit Model
Intercept	0.6658 (1.9919)***	0.3985 (1.927)***
Price	-0.2008 (-3.5284)*	-0.1213 (-3.510)*
Income	0.00017 (2.7195)*	0.00010 (2.991)*
Log-likelihood	-112.45	-112.44
Chi-square	23.8558*	23.8760*
McFadden R^2	0.0982	0.0980
% Right Prediction	62.95%	62.92%

* Significant at 1% level

TABLE 3
Estimating of mean mean WTP for Manukan Island Sabah

	Lower Limit 95% Confident Interval	Mean	Upper Limit 95% Confident Interval
Logit Model	3.99	5.02	6.14
Probit Model	4.34	5.00	5.69

Source: Computed from field survey

TABLE 4
The estimation of additional benefit of Manukan Island, Sabah 1988 - 1998

	Domestic Visitors	Expected Increase Benefit	Foreign Visitors	Expected Increase Benefit	Total Visitors	Expected Increase Benefit
1988	11,127	55,857.54	1,228	6,201.40	12,355	62,058.94
1989	13,513	67,835.26	1,208	6,100.40	14,721	73,935.66
1990	30,214	151,674.28	886	4,474.30	31,100	156,148.58
1991	34,722	174,304.44	536	2,706.80	35,258	177,011.24
1992	48,269	242,310.38	9,691	48,939.55	57,960	291,249.93
1993	52,514	263,620.28	15,041	75,957.05	67,555	339,577.33
1994	67,517	338,935.34	17,376	87,748.80	84,893	426,684.14
1995	72,889	365,902.78	18,490	93,374.50	91,379	459,277.28
1996	59,729	299,839.58	15,199	76,754.95	74,928	376,594.53
1997	53,930	270,728.60	17,480	88,274.00	71,410	359,002.60
1998	47,492	238,409.84	18,110	91,455.50	65,602	329,865.34

Source: Computed from the Sabah National Park, Various issues.

model would be a more reliable measure. Therefore, the premium value of RM5.02 would be taken as the conservative WTP measure.

From these values of consumers' surplus or the additional maximum willingness to pay to Manukan Island Recreation Area, Sabah, one can compute the additional net benefit of Manukan Island for the respective year by multiplying WTP by the number of visitors to this island (refer to Table 4). The number of visitors has increased from 12,355 in 1988 to 91,379 in 1995, and decreased to 65,602 in 1998 as the result of the regional economic crisis and haze disaster. The number of visitors can be translated to huge monetary economic benefits for the relevant authorities.

CONCLUSION

This study has shown that visitors to the Manukan Island park are willing to pay more than the current RM1.00 to RM2.00 entrance fees. By employing the logit model, it is estimated that the visitors are willing to pay about RM5.02 for the entrance fee. The revenue collected from the visitors could be used as an additional support to the limited fund allocated for maintenance and conservation of the park. Moreover, the revenue derived from the tourism industry is not being earmarked for park maintenance or resource conservation efforts; rather, it is frequently merged with other sources of revenues. Also, without users' fees to effectively capture eco-tourism revenues, alternative land use that provides greater short-run return will often be pursued on

public as well as private land. Setting fees to recreational parks, would enable apportioning the use of resources to the rationale user.

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The Female Body in K.S. Maniam's Play "The Sandpit: Womensis"

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ABSTRAK

Kajian ini menggunakan teori psikoanalisis 'male gaze' oleh Laura Mulvey untuk menganalisis drama K.S. Maniam bertajuk "The Sandpit: Womensis". Dapatan kajian menunjukkan bahawa 'wanita' di atas pentas adalah satu objek (bukan subjek) kontruksi kaum lelaki, untuk ditonton oleh lelaki dan wanita. Karektor wanita Santha mengambil posisi sebagai protagonis lelaki di dalam ekspresi fetisy beliau terhadap Sumathi, sebagai satu objek seksual. Santha melambangkan seorang wanita tradisional dan tidak seksual, manakala Sumathi dilihat sebagai objek seksual yang berani dan provokatif. Karektor wanita di dalam drama ini memasuki wacana lelaki sebagai subjek yang 'jinak.' Dengan ini wanita hanya dapat mendedahkan perlambangan wanita sebagai objek seksual yang tertindas tetapi masih tidak dapat bersuara oleh sebab penindasan oleh hegemoni lelaki. Walaupun analisis psikoanalisis ini memberikan penerangan khusus mengenai kedudukan wanita di dalam situasi budaya, akan tetapi ia meletakkan wanita hanya sebagai subjek untuk dilihat, disebut, dan dianalisis sahaja.

ABSTRACT

This is a psychoanalytic reading of K.S. Maniam's play "The Sandpit: Womensis" through Laura Mulvey's theory of the male gaze. The findings point to the fact that 'woman' on stage has most often been constructed by men, to be viewed by other men and other women as an object, not a subject. The female character Santha may be seen as taking up the position of the masculine protagonist in expressing her fetishisation of another female character Sumathi as an object of sexual desire. While Santha is represented as older, traditional and asexual, Sumathi's behaviour and appearance are coded as sexually confident and provocative. In this play the female characters enter a discourse in the male subject position and they occupy this constructed space 'docilely'. Thus, the women are able to expose the oppressive representation of the female body as ideological, but are unable to affirm a more adequate one. As a consequence the women are still constructed by male hegemony, lacking a speaking voice. This psychoanalytic reading provides us with a sophisticated understanding of women's present cultural condition. However, it also seems to confine women forever to the status of one who is seen, spoken about, and analysed.

INTRODUCTION

This paper examines the portrayal of the female body in K.S. Maniam's play "The Sandpit: Womensis" from the perspective of psychoanalytic interpretation. It will provide the reader with an understanding of women's present cultural condition through the lens of Laura Mulvey's theory of the male gaze which points to the fact that 'woman' on stage has most often been constructed by men, viewed by other men and women as an object, not a subject. Before I delve

into a detailed discussion, a brief background of the playwright and an overview of Mulvey's conceptual theory may be necessary to help the readers with some of the aspects as they are applied to the analysis of the play. In the discussion, characters from "The Cord" by Maniam are also mentioned briefly whenever applicable to show contrast or similarity to the chosen work.

As a writer, K.S. Maniam is best known for his plays and short stories which foreground

women as subject matter. Maniam's interest in writing about women started after the first stage production of his play "The Cord" in 1984 at the Old Town Hall in Kuala Lumpur where he observed the audience's fascination with his two female characters, Leela and Kali, in their scene together. Maniam claims that his attraction to the two women was compelled by his:

supressed sympathy for those living in the shadow of people and peripheral situations.[...] The brief light that played on these two women's inner selves opened up, for me, larger areas of light and shade. I was motivated, then, in the stories and plays that followed, to bring into light what was hidden in the semi-darkness or the darkness itself.¹

Therefore, from 1987 to 1990, his short stories "Ratnamuni", "The Loved Flaw", "The Rock Melon" and "Mala"; and his plays "The Sandpit: A Monologue" and "The Sandpit: Womensis" all portray his preoccupation with various female characters as the victims, the displaced, the deprived, and the violated. When asked whether he saw himself as a dramatist or as a story writer, Maniam replied, "[...] I wouldn't call myself a playwright or a novelist or a short story writer or a poet [,] but all in one — I started out with poetry."² He began to contribute poems to a local newspaper in the 1960s and later some of his poems were also published in the semi-annual *Southeast Asian Review of English (SARE)*.³ His plays "The Cord", "The Sandpit: A Monologue", and "The Sandpit: Womensis" are published in *Sensuous Horizons* by a British publication company in London (1994).⁴ Maniam is not only a writer, but also an educationist: he was trained as a teacher at Brinsford Lodge, England, received a certificate in Education from the University of Birmingham in 1964, and taught in several local schools in Kedah before going to the University of Malaya to do his undergraduate degree. In 1973 he graduated and in 1979 he completed an M.A. degree in English. He worked at The Taylors College for five years and served as a lecturer in

the University of Malaya for several years before resigning to open his own business.

CONCEPTUAL THEORY

Briefly in the 1980s, feminist theorists' interest in the study of cultural representations of the female body brought about productive and illuminating feminist rereadings of culture. Among these theorists are Alison Jaggar and Susan Bordo (1992), who argue that "the body, notoriously and ubiquitously associated with the female" can be seen as a "locus of social praxis, as cultural context, as social construction [...]" whose changing forms and meanings reflect historical conflict and change and on which the politics of gender are inscribed with special clarity"⁽⁴⁾. Drawing on the work of Michel Foucault, Bordo (1992) argues that the female body, as both a cultural text and a site of practical social control, is also "a text of femininity," of what it means to be a woman (13-20). Bordo justifies her claim by giving a detailed cultural reading of hysteria, agoraphobia, and anorexia nervosa as forms of female protest against and retreat from conflicting constructions of femininity.

Other feminists such as Susan Suleiman (1986) and Jane Ussher (1997) observe that the fascination with the female body in its myriad representations in art, in literature (poetry, mythology, religious doctrine, prose narratives of all kinds), in cinema, in medical and psychological treatises on sexuality, and in pornography is ubiquitous in the Western cultural imagination. Just as the female body attracts, claim Suleiman (1992:1) and Ussher (1997:104-123), it also inspires fears and fantasies, desire and repulsion; hence, the body is "beautiful but unclean, alluring but dangerous"— "a source of pleasure and nurturance, but also of destruction and evil" (Suleiman, 1992:1). Such contradictions are acknowledged by most feminists (including Jaggar and Bordo) because "[t]he cultural significance of the female body is not [...] only that of flesh-and-blood entity, but that of a *symbolic*

¹ K.S. Maniam, 'Preface' in *Sensuous Horizons: The Stories and The Plays*, (1994: x).

² Annie Greet. 1991. 'An interview with K.S. Maniam at the Flinders University of South Australia, April, 1991', in *Centre for Research in the New Literatures in English (CRNLE) Reviews Journal* 1, (1991), p.2.

³ His short stories have been published and anthologised in *Malaysian Short Stories* Lloyd Fernando, ed. (1981); Bruce Bennet and Janaki Ram ed. *Encounters: Selected Indian and Australian Short Stories* (1988); and Trevor Carolan ed. *Rim of Fire: Stories from the Pacific Rim* (1992).

⁴ His other plays "Breakout" and "Skin Trilogy" have not been published.

construct" and everything that is known about the body, adds Suleiman, as regards the past and present, "exists for us in some form of discourse; and discourse, whether verbal or visual, fictive or historical or speculative, is never unmediated, never free of interpretation, never innocent. This is as true of our own discourse as of those we might seek to analyze or criticize" (Suleiman 2).

In order to investigate the representations of the female body (the analysis of femininity or female sexuality) in art and film, says Ussher, some understanding of the theory of the masculine gaze is necessary because feminist critics have persistently and effectively argued that "the masculine gaze has, historically, dominated the world of art and film" (105). Similar arguments have been made about theatre: feminists such as Gayle Austin (1990: 82-92) and Jill Dolan (1991: 41-58) have incorporated the theory of the masculine gaze in their analysis of drama and live performance. Feminist film critics have been among the first to incorporate the theory of the gaze to critique their genre. Austin, Dolan and Ussher all cite the theory of the gaze elaborated in Laura Mulvey's groundbreaking article "Visual Pleasure and Narrative Cinema", which has become one of the most cited works in the field of feminist film criticism and theory, especially for those who favour the psychoanalytic approach. For Austin, the psychoanalytic explanation of the representation of woman that Mulvey's theory discusses is also applicable to theatre because the gaze is as actively at work in live performance as in film.

At this point a summary of Mulvey's theory is necessary because her paradigm is also applicable to my reading of Maniam's "The Sandpit: Womensis". Mulvey, who is both a theorist and a filmmaker, argues that the representation of the female form is constructed on the absence of female subjectivity because woman is the silent object of the male gaze whereas man can live out his unconscious fantasies and fears through linguistic command (Mulvey 1992: 32-24). In this sense, what constitutes woman's oppression here is her inability to be the subject, the 'maker' of meaning

within the dominant language. Using Freudian/Lacanian theories of subject-formation, Mulvey argues that the visual pleasures of Hollywood cinema are based on two oppositional processes. The first involves the objectification of the female form through "direct scopophilic contact" and the spectator's look here is active and generates a sense of power (Mulvey 1992:28).⁵ This form of pleasure, which requires a distancing between spectator and screen, contributes to the voyeuristic pleasure of looking in on a private world. According to Mulvey, the second form of pleasure depends upon the opposite process, a narcissistic identification with the glorified male image on the screen (26). Mulvey further argues that like the process of objectification, the process of identification in the cinema is structured by the narrative. It inspires the spectator to identify with the main male protagonist, and through him to indirectly objectify the female character on display for his pleasure. The gaze of the male character triggers the forward movement of the narrative and the spectator's identification with the protagonist thus implies a sense of sharing in the power of his active look.

Mulvey then suggests that the reason why women in traditional film are objectified is linked to male castration anxiety and its resolution (following Freud's model of the unconscious). She adds that in order to deal with the male spectator's unconscious wish to escape from castration anxiety (because the female figure connotes lack of penis), the female object is either devalued, punished, saved (or forgiven), or turned into a fetish. While voyeurism, says Mulvey, "has association with sadism: pleasure lies in ascertaining guilt [...], asserting control and subjecting the guilty person through punishment or forgiveness" (29), fetishistic scopophilia, on the other hand, "builds up the physical beauty of the object, transforming it into something satisfying in itself" (29). Mulvey's theory, which argues that the visual pleasures of Hollywood cinema are based on voyeuristic and fetishistic forms of looking which produce unified and masculinized spectators, is applicable to my reading of Maniam's "The Sandpit: Womensis"

⁵ This notion of the scopophilic drive in the spectator is derived from Freud's analysis of scopophilia or the "voyeuristic activities of children, their desire to see and make sure of the private and the forbidden (curiosity about other people's genital and bodily functions, about the presence and absence of the penis and, retrospectively, about the primal scene)". Mulvey, p.24.

because scopophilia, fetishism, and narcissism are as actively at work in this play as they are in traditional film.

Feminists such as Jackie Stacy, Naomi Schor and Mary Ann Doane maintain that Mulvey's film theory is inadequate because it excludes the pleasure of the female spectator and the place of the feminine subject in the scenario. They argue on the basis that the fetishistic model of Mulvey's theory fails to take into consideration that women's pleasures are not motivated by fetishistic and voyeuristic drives (following Freud's account of asymmetry in the development of masculinity and femininity).⁶ However, I would contend that Mulvey's paradigm is still applicable to the reading of "The Sandpit: Womensis" at the textual level (as opposed to the visual level) because of the fact that the play is written from a male perspective, and it might also be argued that the female protagonists on stage represent a male point of view. The masculine gaze present in "The Sandpit: Womensis" does not so much occur on stage; it is more of a glimpse through the medium of language, through the playwright's textual unconscious.

THE FEMALE BODY ON STAGE

"The Sandpit: Womensis" is Maniam's second attempt to centre women on stage; it is a revised version of "The Sandpit: A Monologue" with the inclusion of a second character, Sumathi. It was written two years after "The Sandpit: A Monologue" and was initially staged in a workshop performance in Kuala Lumpur in 1988. Both female characters are present on stage throughout "The Sandpit: Womensis", and the conflict between a young rebellious woman and one who represents traditional morality clearly demonstrates Maniam's critique of the patriarchal

order. Unlike his earlier stereotypical female character (Laksmi) in "The Cord," Maniam's use of these two contrasting female characters (Santha and Sumathi) in "The Sandpit: Womensis" may be seen as an attempt to portray conflicting representations of the female body in Malaysian Indian society as a site of social control and also as one of resistance against the patriarchal norm. The play develops through a gradual process of revelation that may be associated with Freud's psychoanalysis, in which the secrets of the patients' past are slowly and painfully unveiled. In this sense, the gaze of the female protagonists goes back and forth in their reminiscences of past and present events.

Sumathi is a liberated woman who retaliates against the oppressive traditional beliefs and practices that her family forced upon her from childhood. While still a young girl she runs away from home in the hope of seeking a liberated life, but she never gains complete liberation. After leaving home she gets married to Dass and lives under the scrutinizing eyes of Dass' first wife, Santha. To Santha, everything that Sumathi does disgraces the customs and religion that she believes both of them should live by. Just like Lakshmi in "The Cord", Santha is pictured as a passive, chaste and obedient wife who guards her honour and virtue, and has accepted the values of a wife's inferiority and subordination to her husband. Hence, Santha and Laksmi are portrayed in the image of the Hindu Goddess Lakshmi, who represents the model Hindu wife:

she exemplifies the orderliness of human society and human relations.[...]She is typically shown as subservient to [her divine consort]Vishnu. [...]Reflecting her increasing association with social order, several texts locate Lakshmi's presence in righteous behav-

⁶ See Jackie Stacey, 'Desperately Seeking Difference', pp.244-257; Mary Ann Doane, 'Film and the Masquerade: Theorizing the Female Spectator', pp.227-243; both available in *The Sexual Subject: A Screen Reader in Sexuality*, and Naomi Schor, 'Female Fetishism: The Case of George Sand' in *The Female Body in Western Culture*, pp.363-372.

The argument that female fetishism does not exist stems from Freud's analysis of castration anxiety in the little boy: "The child's realisation that his mother does not possess a penis is translated as her having been castrated by the powerful father (whom, within the oedipal conflict he has wanted to eradicate from her desire, since it disrupts their dyadic union). The boy fears the father will also take revenge on him for his murderous wishes, and in rejection of the 'lacking' mother, he 'turns away' from her to identify with the potent father and takes up heterosexual orientation. The little boy's entry into 'normal' sexuality is thus the shock at the woman's lack of a penis. A fetishist's development is arrested at this stage and he tries to deny sexual difference by reasserting a penis-substitute onto the woman (the fetish). The fetish object stands in for the mother's phallus. [...]Because Freud's analysis is based on castration anxiety - the fear of losing the penis - it follows that fetishism must be a purely male phenomenon. Girls have no penis, so why should they need to disavow the horror of its possible loss?" See Gamman and Makinen, *Female Fetishism*, p.40.

our, orderly conduct, and correct social observance. [...]In association with Vishnu, Lakshmi provides a picture of marital contentment, domestic order, and satisfying cooperation and beneficial interdependence between male and female (Kinsley 1989:5).

However, Sumathi is able to obtain a certain degree of freedom from the traditional ways because she has the moral support of Dass, who is no longer anxious to exercise his superiority over his new wife. Physically strong and streetwise, Dass makes a living as a freelance 'street-keeper', ensuring that peace is preserved on the streets that he guards. One day Dass comes home in a battered condition, beaten by thugs at his workplace. Both wives, Sumathi and Santha, nurse Dass back to health. Once recovered, Dass goes back to work in the same streets, until one day he fails to come home at all for four days. It is at this point that the action of the play starts.

This play consists of forty monologues of unequal length delivered by the two female characters. Santha, Dass' first wife, is in her late thirties and Sumathi, his second wife, has just turned thirty. Both appear together on stage but the stage directions indicate that they are in different places: Santha is sitting in front of her house sewing a sari border, while Sumathi is sitting on a chair in a hotel room. They do not converse with each other but rather pour out their thoughts and emotions about their life in relation to their husband, who never appears. Although the audience sees only the two women, they are able to assess the absent character because the play revolves around him; the women's speeches give him an equal presence. Both women are waiting for their husband to come to them. This situation invites the audience to perceive the stage as representative of the two women's psyches and the battle for linguistic authority occurring there as reflective of the struggle taking place within the women's minds. At first glance, Maniam's purpose in presenting the women through monologues seems to be to give a space to the struggle of female subjectivity. However, when the text is read psychoanalytically (and using Mulvey's paradigm), there is evidence of an Oedipal struggle (which I will return to later) and the fetishisation of the female body.

Maniam dramatizes male scopophilia through the eyes of Santha, in her attempt to keep Sumathi within the frame she has constructed for her, one that she has internalized

in her espousal of traditional ways, but Sumathi does not fit in. In this play also, Maniam could be seen as a feminist critic through both the play itself and the character Sumathi, who rebels against the rigid nature of tradition (which I will discuss later). However, through his portrayal of Santha, a traditional Hindu wife who upholds a stereotypical image of Indian women (but learns to modify the image through the example of Sumathi), the patriarchal order or the Law of the Father is foregrounded. Santha might be seen as taking up the position of a masculine protagonist in expressing her fetishisation of parts of Sumathi's body, though her gaze is marked, not by desire, but by fear, hatred, and anger. Santha is at first a voyeur who then turns fetishist while keeping her distance and watching Sumathi continually. "The Sandpit: Womensis" can also be read as a play which centres around the theme of the construction and reproduction of feminine identities, and in which the activity of looking is highlighted as an important part of the process.

"The Sandpit: Womensis" seems to begin with Santha as the protagonist, but as soon as Sumathi speaks, she also appears to be a protagonist. Sumathi is the one responsible for 'making things happen' in the play while Santha is the one who undergoes change. The double-protagonist structure (the traditional wife and the modern wife) gives a female spectator two active subjects on the stage with whom to identify, if she wishes to do so. Although no male protagonist appears on stage, a male spectator or reader may identify with Santha as the 'male' voyeur of the patriarchal tradition, who seeks to objectify Sumathi and renders her a non-subject. She may also be seen as the mother figure who carries the Law of the Father through her alliance with the patriarchal order, whose gaze is 'castrating' and who seeks to enforce the Law on the transgressing Sumathi. Failing to do so, she resorts to punishing the deviant woman with her look of resentment, disgust and fear.

In accordance with Mulvey's ideas, the object of fetishisation in "The Sandpit: Womensis" is a woman - Sumathi. It would be useful here to cite Mulvey's definition of fetishism from her *Fetishism and Curiosity* (1996) to further clarify my analysis:

Fetishism is born out of a refusal to see, a refusal to accept the difference the female body represents for the male. These complex

series of turnings away, of covering over, not of the eyes but of understanding, of fixating on a substitute object to hold the gaze, leave the female body as an enigma and threat, condemned to return as a symbol of anxiety while simultaneously being transformed into its own screen in representation (64).

Analogously, as a modern wife, Sumathi's image is saturated in sexuality. In many ways, she represents the 'assertive style' of the heterosexual woman, inviting masculine consumption. Sumathi is represented as puzzling and enigmatic to Santha. The desire or drive propelling the narrative is partly a fear of her sexually dangerous nature, which cannot be contained and hence is a threat; but there is also a desire to know about her and to solve the riddle of her femininity. Santha begins to fulfill this desire by observing Sumathi's behaviour, gathering clues about her identity and her past life, and questioning her role as a wife to Dass. The construction of Sumathi's femininity as a riddle is emphasized by a series of misunderstandings surrounding her identity just like the character Kali in "The Cord" who is referred to as 'a gossip' and is openly humiliated as a woman without moral values.

As soon as Sumathi becomes entangled in Santha's world her sexual respectability is called into question. First, she is assumed to be having an affair with Dass' friend Arumugam in the hotel, then she is suspected of prostituting herself, and finally she is accused of using her body to seduce Dass. These misplaced accusations about Sumathi's sexuality work in relation to Santha, who is represented as the epitome of acceptable Indian feminine sexuality. Santha's voyeurism is exemplary of the symbolic order or the Law of the Father. She places herself on the right side of the law, and Sumathi on the wrong. Her power to subject Sumathi to the voyeuristic gaze makes Sumathi an object of denigration. Maniam's creative use of the identification process from the point of view of the female protagonist draws the audience deeply into Santha's position, making them share her uneasy gaze, which places them in a voyeuristic situation:

[...]Athan told me. 'The girl had to be saved. Ran away from home. Couldn't take the punishment her parents gave her.'[...] Punishment? Didn't know how to behave properly. 'Teach

her how to be a good housewife,' Athan told me. Just to give power to the first wife. If I told her to sit like this, walk like this, he interfered. Don't look at men when you talk to them, I said. No need for that, he said. She deserves to be punished. A woman who can't be a woman. The way she sits! (*Comes down to the steps and sits with her legs spread out, her breasts thrust forward.*) Like this. All the winds in the world blowing between her legs. All the men in the world touching her breasts with their eyes. Tcha! That a woman? Hotel-room woman. What else went between her legs? Always going with that Arumugam.[...]All that body not properly covered up. When you see flies sitting on [a]lot of flesh, you lose your appetite for meat (190-1).⁷

Sumathi is seen as overtly sexual, dangerously seductive, and does not give the appearance of an acquiescent femininity which will be easily satisfied. Sumathi is accused of being "a woman who can't be a woman" when she refuses to follow the social etiquette taught to her by Santha; called a "wind-rubbed woman" because she sits with her legs far apart with the wind blowing in between her legs (also signifying the female orificial body); and called a "hotel-room woman", a negative connotation of one equivalent to a 'prostitute', because she was found in a hotel room before marrying Dass, is seen in the company of other men besides her husband, and frequents places customarily forbidden to women ("There are many places where women still can't go. Athan took me to places women couldn't go.": 186). She is also criticized for the way she sleeps ("Sleeping with her legs east and west.": 196), and for wearing short dresses that expose parts of her body which should be covered. In short, Maniam is suggesting that the female body is always subjected to the commanding gaze of the male. Santha herself, who stands in for a 'male' voyeur, perceives Sumathi as a series of body parts; a body that represents a 'consumer delight' with the attention paid to her "breasts" and "in between her legs." By doing so, Santha tames her fear of Sumathi, tames her threat. She is an object to be dissected, not a person to be feared.

Punishment for one who transgresses is serious and is reflected through the ritual cleansing of Sumathi's body, as narrated by Santha:

⁷ This page number and all the subsequent page numbers for Maniam's text refer to "The Sandpit: Womensis" in K.S. Maniam, *Sensuous Horizons: The Stories and the Plays* (1994).

One day I[Sumathi] came back tired and sat down in the doorway. My mother was taking down the clothes from the lines. A wind was blowing. It lifted my skirt to my thighs. Before I could bring down my mother saw. Didn't say anything. Heard my mother and father whispering that night. You know what they did that week? Conducted a puja. A strange puja. My mother made me wear a sarung up to my chest, then took me to the bathroom. There she poured water over my head and body. Poured and poured until the body was cold. Poured and poured until I couldn't breathe. Then she took me to the family shrine. Made me kneel down in front of all those pictures of gods and goddesses, dead grandfathers and uncles. She said some prayers. My father said some prayers and held me down by the hair. The[n] he sat nearby on a stool, watching me. I was not to lift my head and body until the sarong dried. The wet cloth sucked my blood away, sucked my nerves away. You call that living? (193-4)

socializing the daughter into a life of subordination, into the restrictive codes of femininity.

Similarly, Santha believes that Sumathi deserves to be punished as she says: "Even I, [...]felt like beating her.[...]For not seeing things in the right place"(205). Santha believes Sumathi's dangerous sexuality has aroused Dass' passive desire, lured him into bodily pleasures, and caused his decline in strength: "When Sumathi came the going began."(189), and her evil presence has caused the death of her only child that she could conceive: "I lost the only child I could have that year.[...]Only four months old. Just dropped out of my womb one morning. Why didn't Sumathi see?" (200). In short, in Santha's eyes, Sumathi has become the source of danger, contamination, and carnal corruption.

Santha, the 'male' purveyor of tradition, privileges mind or soul over the body, in contrast to Sumathi, who declares: "The body's the only thing you have."(191). Here, Maniam apparently associates tradition (Santha) with soul and modernity (Sumathi) with body, suggesting that the disembodied soul is privileged to rule, to govern the body and not vice versa. In this way, and in accordance with religious tradition, the soul is contrasted with the body and is seen as better, nobler, cleaner, and ultimately that which Santha possesses, in contrast to Sumathi. In other words, Santha views the body as unimportant, as something related to the merely physical, to flesh, and hence to carnal, as opposed to religious, knowledge. The body is also associated with decay, as a site of deterioration: "Sumathi is some cheap cloth and sour perfume which won't last for long."(212). Santha as a devout Hindu, treats the body only as a medium for something higher beyond the soul: "I put on different things, enter different smells and bodies.[...] Sumathi sees only the outside of you, your body. I go inside you and can become you"(212-3). This suggests that tradition encourages the control of mind over body, which it sees as a site of mortality, decay, carnal desires; it requires the regulation of sexual drives. Seen in this way, the body is marked as inferior to soul. Santha's tradition criticises the physical nature of Sumathi's modernity and urges a return to the spiritual, that is, to the norms of the traditional culture.

As mentioned earlier, Maniam dramatizes his critique of the patriarchal norm through his

The use of this ritual act to cleanse the exposed female body, to re-establish the body in its 'innocence' and 'purity' may also be read as a traditional means of eliminating resistance in the 'corrupted' female flesh. This is initiated by Sumathi's own mother, who then sees it as her duty to inform Sumathi's father, who punishes her accordingly. The dominant culture has imposed its oppressive ideology on the female body: she is punished for having been caught with her thighs exposed. As Dorothy Dinnerstein says in 'The Dirty Goddess', patriarchal culture treats the female body as something mysterious, eliciting feelings of "awe and fear, sometimes disgust" or "destructive rage" in men, and its "alien, dangerous nature [...]can be controlled through ritual segregation, confinement, and avoidance; it can be subdued through conventionalized humiliation and punishment [...]through formalised gestures of respect and protectiveness"(1987:125). Sumathi's mother, who initiates her punishment, is not merely the purveyor of cultural knowledge to herself, her community and her children. She is herself the recipient and guardian of patriarchal tradition to the extent that she has internalized notions about the proper behaviour of women, and especially of her own daughter, Sumathi. Her world is reflected in her unquestioning adherence to the norms and her decision to administer punishment to Sumathi to safeguard her from carnal corruption. Here, the mother may also be seen as the tool of patriarchy by

character, Sumathi. There is perhaps no more condensed statement of Maniam's understanding of a woman's annihilation by an oppressive culture than that expressed through his character Sumathi in her description of her parents' house, where she lived prior to her marriage to Dass:

SUMATHI: [...]But I come from a house of silence. From the house of the dead. I'm not bluffing. You just visit my family. Better go on Friday. The incense will choke you. After the smoke goes away, you'll see what I'm talking about. The little box and the rows of photographs on the wall. Gods and goddesses live in the little box. Around the box are the dead. Dead great-grandfathers, grandfathers, great-grandmothers, grandmothers, nephews, cousins and the little ones, the nieces, only dead a few years ago. Every time I passed that wall, I passed a graveyard. My body wanted to live. I waited for my family to go away to a wedding. Waited for them to go away to a funeral. Then I let my body dance. I don't know from where the voice found the words. There was the dance and there was the song (189-90).

The "house of silence/the dead" gives the audience the image of the suffocation, oppression, inhibition, confinement, and hopelessness that Sumathi faces living in a restricted Indian culture. Even the incense is described to give the effect of suffocating smoke and odour lingering in the house of silence/the dead where the "gods and goddesses live in the little box". Around the little box are the pictures of ancestors and the more recently dead. This image depicts the constriction of Sumathi's life; she is forced to live "under the wisdom of the dead" (206) and to worship the "authority of the dead" (198). The description of the wall as a graveyard further suggests to the audience the feeling of eeriness and sadness which Sumathi experiences. Her body is fighting for some form of life, of freedom from a living death. She wishes her family to go away, to leave her alone so that she will be released if only temporarily, from the confinement of her surroundings, of her rigid family customs and traditions. With her family gone, her body comes alive and finds a voice. Her body dances and she sings a song. A song to celebrate life. This outburst of energy signifies the resistance to patriarchal power and authority that the young body of Sumathi has been waiting to express. It is the release of strength and energy pent up in the oppressed body. This element of struggle, of rebellion, which is

instinctual to the repressed body of Sumathi and will liberate her from the oppressive family praxis, is foregrounded here by Maniam.

As a playwright, Maniam rewrites the ideological assumptions regarding the female body in traditional Indian culture by bringing the oppressed woman out of the privacy of the family and giving her a voice in the theatre, allowing that voice to speak publicly. He presents her as a woman who is silenced by the phallogocentric construction of female identity. Clearly, to Maniam, the above description of Sumathi's past life represents a grim picture of a life so hemmed in by constraints, so laden with impositions, that it could not come naturally to a rebellious young woman who lives in a strict community where the female body is to be concealed; socially through proper demeanour, and physically through modesty in dress. The rules and regulations of the house and the wider tradition must be strictly observed and on no account may she refuse or demonstrate any disagreement. There must be restraint and a 'proper' distancing between men and women, which is achieved through bodily concealment, avoidance of eye contact, and restricted conversation. From childhood on great emphasis is placed on the importance of modest behavior, of sitting decently, of covering the female body, of learning to keep silence at the appropriate time, and of addressing the elders in a respectful manner. This social etiquette is referred to throughout the play.

In "The Sandpit: Womensis" Maniam also criticizes the repressive religious ideologies, superstitious beliefs, and rigid rules imposed on women by the conservative people of his society. He channels his attack on oppressive practices through Sumathi's rebellious attitude towards the blind obedience imposed on her and on all women by Indian tradition:

SUMATHI. [...]My father too had his chair. Sat on it like a king. Called my mother. She went in obedience, wearing her sari and the pottu on her forehead. The pottu, the kumkum mark of slavery. [...]Do you know, akka, how much beating she took? Not just with the stick and slippers. But the other kind of beating. When she couldn't answer back. Couldn't defend herself. Put a wrong suspicion right. The kind of beating that killed her mind. When the pottu wasn't there the forehead was as smooth as a baby's. Empty (203-204).

Sumathi believes that Santha's tradition teaches only "blindness" and "stupidity" (206), that enjoins wives to be pious and superstitious: "go to the shrine, pray, and put on the pottu. Then go and look upon the husband's face. That way you won't bring misfortune to the family and yourself" (206). The sign of the "pottu" is binding and oppressive because it connotes that a wife lives only for her husband, annihilating her own needs. Sumathi questions the oppressive tradition that confines a woman to the house, slaving and submitting solely to her husband's needs:

'Wash the pots, mugs and plates with ash and assam,' you said, 'before the husband gets up. Don't sit down with the husband at breakfast. Don't sit with him at lunch. Serve him first and eat last. Don't look at any man who talks to you. Keep your head covered with your sari border.' What were you trying to do, akka? That was the kind of life I was putting behind me(206).

Sumathi, who has run away from her family's house is not about to be imprisoned in another life similar to the one she has left. She is determined to have a better life, free from social inhibitions, superstitions, and oppressive tradition. To her, Santha is too conservative and restrictive: "Akka is full of ceremonies. Like my family. One for every day of the week. One to choke you, one to tie your feet to the house door, one to tie up your mind"(185).

Maniam's view of the female body as an 'erotic subject' is expressed through Sumathi. She is no traditional, sari-clad, pottu-dotted wife who is passive and submissive; she is a woman who acknowledges her needs and desires. Here, on stage through Sumathi, Maniam breaks the taboo of revealing female sexual experience in public, thus opening up the discussion of women's sexual desire and control over their bodies: sex does not have to be a passive experience for women or just for procreation, but rather a sensuous one, with women playing an active role in sexual communion. Maniam communicates his view of the sexuality of the female body through his foregrounding of Sumathi not as the passive object of the male gaze, but rather as a subject who expresses her own pleasure:

SUMATHI. [...]Yes, we also slept together, Athan and I. But like a man and a woman who knew what their bodies needed. Who knew what their bodies couldn't do. We never forced the bodies into anything unnatural (204).

Sumathi therefore represents that which is suppressed in woman, an erotic 'otherness', more real than the male projection of woman as a passive object. Maniam contrasts this view with the traditional conception of sex as recalled by Santha. Dass complains to her when they are about to make love:

SANTHA. 'You're like ice,' he told me. 'Don't know how to play. Sometimes I'm afraid to breathe in front of you.' He didn't know how to play with me. I don't play with my clothes all taken off (204).

Here the traditional wife is seen as passive and sexually inhibited. Santha does not allow Dass to see her without clothes for the Indian tradition dictates that "the husband shall not see her when she is adorning herself. Likewise he must not see her in her confinement. She must not be seen naked or half naked"(Malladi Subbamma 17). Maniam's construction of Santha's sexuality is analogous to the Freudian principle which equates passivity with the female and activity with the male. According to Freud, a woman's pleasure is located in the 'passive' vagina rather than in 'active', 'phallic' sexuality; he considered the vagina the true seat of female genital sexuality (1905).⁸ Dass thinks Santha is devoid of all passion: "You can't make my body burn like Sumathi." (207); and he prefers to have Sumathi:

SANTHA: [...]After Sumathi came into the household, he touched me only a few times. And not like a husband and a wife. Like a man in a hurry doing his duty. But he and Sumathi! The things they did! No, no, no need to think about that now. Did she go after him because of that? The modern woman(203).

Here Maniam is foregrounding the idea that 'modern' women are no longer required to be modest or to restrict their sphere of activity to the home, or even to realize their properly feminine destiny in maternity: normative femininity is coming more and more to be centred on a woman's body — not its duties and

⁸ See also Elizabeth Grosz, *Jacques Lacan: A Feminist Introduction* (1990: 70).

obligations or even its capacity to bear children, but its presumed heterosexuality and its appearance (attractiveness), thus replacing the religiously oriented tracts of Santha's tradition.

In contrast to Santha, Sumathi is aware of her body, its sensuality, and its value as a commodity:

I was young then. Didn't know. Now a lot of mangoes in the city. Sold at all kinds of prices. Akka doesn't know. Doesn't understand. The body's the only thing you have. Tell her that, she'll wrap herself some more in her sari(191).

Sumathi's knowledge of the world includes her discovery that young girls or women ("mangoes in the city") can be corrupted or lured by money into prostitution ("Sold at all kinds of prices"), but she is not about to be seduced or exploited by men because she knows that she possesses a good moral character. She is not like Santha, who hides under the protective folds of tradition. However, Sumathi's sensuousness is reflected in her masochistic enjoyment of flagellation as sexual foreplay, as recalled by the jealous Santha:

Why do you call it The Firemaker? You used it only on Sumathi. I was there all the time. Why didn't you use it on me? I remember what you said as you beat her. 'There! This will make your body burn. Little knots of flame all over.'(207)

Then, again Sumathi describes her participation in the masochistic act:

The Firemaker isn't new or strange to me. The many times athan beat me with The Firemaker you just stood there and watched. I didn't care. I was becoming lazy. Letting my body go to sleep. Athan was doing with The Firemaker what I did a long time ago with the vepalai leaves. [...]I wriggled my body this way and that. There was no shame. But when he beat you with The Stinger what did you do? Just stood there like a block of stone. Let the sari fall in shreds around you (200-2).

For Sumathi, "The Firemaker" is not only an instrument for erotic foreplay, but also a tool "to wake up the blood"(200), to combat laziness and ignorance: "Beats you for sleeping. Beats you for not knowing. Beats you into wakefulness" (215). "The Stinger" which Dass uses to beat Santha, on the other hand, is "[a] set of rules.

Rules that have come through time. Rules that have come through people. Rules that beat you down. Rules you use to beat down others"(215). The masochism of these two women may be explained using Freud's categorisation of drives: sadism as active, and masochism as passive forms of (scopic or aggressive) drives(Grosz 77). In this sense, both women are passive receivers of Dass' sexual aggression. However, Sumathi is able to enjoy apparent passivity by willingly accepting the refined pleasure to be derived from Dass' aggressive behaviour. Santha, on the other hand, with her natural shyness, modesty and rigidity, treats Dass' sadism as an attack on her body, as a form of punishment. For Freud, the aggressive impulse in men is normal: "The sexuality of most men shows an admixture of aggression, of a desire to subdue(Freud, 1938: 569)."⁵

Sumathi breaks away from the traditional upbringing of her family, that tradition which almost broke her. She is the "chatterer" for she will not be silenced, because to her "Silence isn't strength. Silence is weakness. Silence is fear"(203). The silence of her family almost destroyed her and she vows never to be silent again. Also, Sumathi does not treat her husband in the same way that Santha treats him. She does not wait for him to come home, she goes out to look for him if he fails to return. She is not shackled in the home doing household chores; she is taken to places where wives are not usually taken: the bars, the nightclubs, the discos. In fact, Sumathi knows what she wants in life, which is not to be like her sister in marriage: "No, no, I'm not going to be just a shadow. I started living with Athan. Not living for him. You've lived so much for him, you can't do anything by yourself"(206-7).

As mentioned earlier there is evidence of an Oedipal struggle in "The Sandpit: Womensis". Santha's object of desire, whom she refers to constantly, is Dass, and the presence of the younger wife who completes the Oedipal triangle, threatens the stability of her relationship. However, this threat does not affect Dass in any way. He continues to keep the two wives under the same roof. Dass' desire to have two wives of contrasting character may be explained using Freud's theory regarding the male's splitting of

⁵ Quoted in Pamela Gibson, ed. *Dirty Looks: Women, Pornography, Power* (1993: 210).

his relations with women. In his 'Contributions to the Psychology of Love', Freud outlines some of the effects of the boy's resolution of the Oedipus complex on his later love relations:

The requirements of symbolic functioning are contradictory: on the one hand, the boy's sexuality is virile, active, predatory; yet, on the other hand, it must be controlled, repressed, sublimated, and redirected. This split attitude may affect the man's choice of love-object. For example, [...]men may feel split between feelings of tenderness, respect, affection, and sexual 'purity'; and feelings of a highly sexual yet debasing kind. Affection and sexual desire seem to inhabit different spheres, often being resolved only by splitting his relations between two kinds of women - one noble, honorable, and pure (the virgin figure), the other a sexual profligate (the prostitute figure). He treats the first with asexual admiration, while he is sexually attracted to, yet morally or socially contemptuous of, the second. Here the male lover attempts to preserve the contradictory role of the mother (as pure and as seducer), while removing its contradictions by embodying its elements in separate 'types' of women, either virgin or whore, subject or object, asexual or only sexual, with no possible mediation (Freud, 1905: 185).¹⁰

It is possible to interpret Dass' conflicting desire for the two wives as representative of his feelings of ambivalence (of hostility and contempt) in his pre-Oedipal relation to his mother. Santha, who takes on the virginal role, noble and asexual, represents Dass' incestuous desire for the absent mother. He exalts and respects Santha in the same way that he treats his own mother: "You respected me too much, let me live within my silence"(210). Sumathi, who takes on the 'prostitute figure' role, represents the unfaithful mother who has betrayed Dass (by being with his father). Therefore, the figure of Sumathi ("Hotel-room woman", 191), signifies Dass' incestuous fantasy of the 'prostitute' mother, the sexual being who is actively desired by other men. With Sumathi, Dass can fully indulge his

socially forbidden sexual desires and impulses (which seem inappropriate with the virginal figure of Santha) because he is not afraid of being judged by her. Marrying two women of contrasting character and behaviour in a way resolves and fulfils Dass' pre-Oedipal fixation on the two contradictory mother figures.

Santha's desire to become more like her rival — a more modern, sexually assertive, and attractive feminine image — is offered temporary narrative fulfilment (209). However, by her refusal to become a sensuous feminine other she rejects the complete transformation, insisting upon her differences from Sumathi ("That's what you're doing, akka. Always separating. Yourself from Athan. Yourself from me. Your life from ours" (202)). Santha has only vaguely sought freedom and has not attempted to shake off orthodox conventions and moribund tradition. That women embrace the very system that oppresses them is, of course, the supreme irony. Sumathi, who avoids motherhood and its inevitable consequence, dependency in her marital relationship, ventures out of the home into the public space where 'women are prohibited', transgressing conventional forms of feminine behaviour. She goes to the hotel room as if it is her own, waiting for Dass to come. In the streets, Sumathi challenges Arumugam's patronizing invitation to prostitute herself, aggressively turning down the offer: "Nobody can buy me.[...]Money can't always buy women"(212). In contrast to Sumathi's public confidence, Santha is only capable in the privacy of her own home, in her familiar domestic environment.

Maniam, while forceful in his rejection of the old patriarchal morality, shows the elusive nature of his views on women's status in contemporary Indian Malaysian society by putting his protagonists in a polygamous situation.¹¹ Sumathi, a young girl who runs away from home to avoid its oppressive environment, comes face to face with another form of oppression by

¹⁰ Quoted in Grosz, p.129.

¹¹ According to a research done by Kalyani Mehta in Malaysia, an Indian wife would rather die than leave or divorce her husband. Such is the shame or taboo of being a divorced woman in Indian culture. See Kalyani Mehta, *Giving Up Hope: A Study of Attempted Suicide Amongst Indian Women*, (1990: 41). Under the Chinese and Indian customary laws, the men were permitted to practice polygamy and there was no limit to the number of wives they could marry until the year 1982 when the Law Reform for Marriage and Divorce Act 1976 was implemented and polygamous marriages were abolished for the non-Muslims in Malaysia. However, limited polygamy is still permitted for the Muslim men in Malaysia until today. See Raja Rohana Raja Mamat, 'The Legal Status of Women in Malaysia' in *The Role and Status of Malay Women in Malaysia: Social and Legal Perspectives*.

marrying Dass, who is already married. It appears, however, that the highest end of Sumathi's existence must be marriage:

SUMATHI. When Athan married me he told my father, 'I saved your daughter. I saved you from a lot of shame. I don't want the comedy of a temple wedding. The registration office is enough. Then a puja at the temple. After that a dinner for anyone you want to invite' (185).

Dass is convinced that he is doing a favour to Sumathi and her family because women's alleged need for marriage rests on the assumption that they have no satisfying alternative to devoting their lives to a man. Women must depend on men for their significant relationships because women are incapable of being by themselves. This shows that the protection of female virtue is for the benefit of the male ego. Sumathi's running away reveals the irony surrounding the concepts of 'honour' and 'virtue' on which patriarchy is built, because she is still subjected to the myths of the system.

Sumathi's active rebellion and yet compliance may be explained clearly using Freud's female Oedipal scenario. Sumathi, who runs away from home, rejects her mother who carries the Law of the Father and who punishes her for her transgressions, but allies with Dass, a paternal figure ("Another king in that small, noisy town": 186) in place of her mother. Sumathi rejects her mother who is 'castrated' and 'insufficient' to identify with Dass, who represents a potent, paternal substitute for her mother. Her dismissal of motherhood reflects her rejection of the usual Oedipal imperatives. However, by centering her desires around the father figure in Dass, she agrees with the Oedipal scenario; thus she becomes once more impotent and dependent. Sumathi also seems to condone the fetishisation of the female body into an object - here, fruit delicious to the taste - as shown by the song that she sings:

Don't cover young mangoes with ash,
they will ripen before their time.
Don't cover young mangoes with lime,
they will die before their time.
Let the mangoes hang on the branch,
glow with sun, swell with rain.
Let the mangoes catch the mist,
catch the sea, catch the sky.
Let the mangoes fill with life,
sway with life, dance with life,
dance with life...(190)

Here, the "young mangoes" clearly represent the female body; this is suggested in another related passage from Sumathi's monologue: "Now a lot of mangoes in the city. Sold at all kinds of prices[...]The body's the only thing you have"(191). This more negative connotation signifies the passive acceptance of female fetishisation at the Symbolic level (via language), suggesting a complicity with the patriarchal order and women's social subordination.

If Sumathi represents the female body as the site of decay ("some cheap cloth and sour perfume which won't last long." 212) and sexual danger ("hotel-room woman", image of promiscuity), and must suffer for her transgression, Santha represents the body's entrapment ("wraps herself some more in her sari. Deep inside." 191) and subordination ("I'll sit and wait and work on this border. Maybe before I finish it you'll come" 216). At the end of the play, Santha emerges stronger and wiser through her sexual knowledge, but seems reduced rather than expanded because she is not able to incorporate her sexuality as an intrinsic part of her identity. Maniam presents both women as tortured by the lack of positive alternatives; both are relegated to the private, domestic sphere of marriage. Unlike Lakshmi in "The Cord", death is the only way out of misery as she was driven to commit suicide to free herself from her oppressive spouse and society. However, Maniam focuses on Santha, who carries forward the values of the dominant culture, the self-controlled and self-disciplined woman, exemplar of the traditional traits that are deemed admirable. Looking at this play through the lens of Mulvey's ideas points up the fact that 'woman' on stage has most often been constructed by men, to be viewed by other men and by women as an object, not a subject.

Santha may be seen as taking up the position of the masculine protagonist in expressing her fetishisation of Sumathi as an object of sexual desire. Through her gaze, she can also be seen as identifying with Maniam's position as the narrator: that of active, desiring masculinity. While Santha is represented as older, traditional and asexual, Sumathi's behaviour and appearance are coded as sexually confident and provocative: she is one who indulges in 'phallic' (masculine) activities. Both women, however, represent the male's (Dass') pre-Oedipal fantasy of the phallic mother who is both "virginal, pure, noble, sexless (as a consequence of his repression of his own sexual wishes about her),

and a whore, the result of his realization that, long before his birth, the mother has already been unfaithful to him (with his father)"(Grosz 129).

CONCLUSION

In "The Sandpit: Womensis" the female characters enter a discourse in the male subject position because that is all there is. They occupy this constructed space 'docilely'. Thus, the women are able to expose the oppressive representation of the female body as ideological, but are unable to affirm a more adequate one. As a consequence, the women are still constructed by male hegemony, lacking a speaking voice. Although the two women appear on stage, they do not speak for themselves — their knowledge comes only from Maniam and through his male perspective. They (Santha and Sumathi, or Leela, Lakshmi and Kali) are not on the stage, but male representations of and conjectures about them are, and they as subjects do not take the stage, do not occupy their place. A psychoanalytic reading of Maniam's play provides us with a sophisticated understanding of woman's present cultural condition, but it also seems to confine her forever to the status of one who is seen, spoken about, and analysed. In order for this theory to be of any use to the female subject, she must somehow interrupt its present state of existence; she must find ways of using it that allow her to look beyond the conditions of her present history: beyond the fate of Lakshmi, who lacks a speaking voice because Maniam has chosen to make her obscure by reducing her to a victim of suicide, or the fate of Leela who is still trapped in her domestic domain, or the fate of Santha and Sumathi entangled in their polygamous marriage.

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Non-linear Dependence in the Malaysian Stock Market

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ABSTRAK

Kajian ini mengkaji secara empirik kewujudan ketidaklinearan dalam pasaran saham Malaysia dengan mengaplikasikan ujian Brock-Dechert-Scheinkman (BDS) dan bispektrum Hinich. Hasil keputusan BDS menunjukkan bahawa ciri siri pulangan di pasaran saham Malaysia didorong oleh mekanisme ketidaklinearan. Aplikasi seterusnya dengan menggunakan ujian bispektrum Hinich juga menyokong hasil ujian BDS. Hasil keputusan kajian ini memberi implikasi kuat terhadap kerja penyelidikan yang melibatkan pasaran saham Malaysia kerana kewujudan ketidaklinearan menyarankan bahawa penggunaan kaedah linear adalah tidak sesuai untuk membuat inferens.

ABSTRACT

This study empirically investigates the presence of non-linearity in the Malaysian stock market, employing the Brock-Dechert-Scheinkman (BDS) and Hinich bispectrum tests. The BDS results reveal that the characteristics of the returns series in the Malaysian stock market are driven by non-linear mechanisms. Subsequent application of the Hinich bispectrum test confirms the results of the BDS test. The result of the present study has strong implications on the empirical work involving the Malaysian stock market as the existence of non-linearity suggests the inappropriateness of using linear methods for drawing inferences.

Keywords: Non-linearity, BDS test, Hinich bispectrum test, stock market, Malaysia

INTRODUCTION

It is an accepted fact that financial economics has been dominated over the past few decades by linear paradigm, with linear models being widely employed in the time series analysis of financial data. However, with the development and adaptation of more sophisticated econometric techniques, this assumption of linearity, which has been made as an approximation of the real world, is now found to be inappropriate.

Specifically, the adequacy of conventional linear models has been challenged in recent years with abundant evidence emerging in the literature to suggest non-linearity¹ is a universal phenomenon, at least for time series data of stock prices. This growing body of research covers stock markets of the U.S. (Hinich and Patterson 1985; Scheinkman and LeBaron 1989; Hsieh 1991), U.K. (Abhyankar *et al.* 1995; Opong *et al.* 1999), Germany (Kosfeld and Robé 2001), G-7 countries

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¹ In the literature, there is no generally agreed definition for 'non-linearity'. Following Ammermann and Patterson (2003: 177), any time series model that cannot be written in the form of a linear ARMA or ARIMA model, i.e., any type of model that exhibits some form of serial dependency other than simple correlation or autocorrelation, is, by definition, a non-linear model.

(Sarantis 2001), Turkey (Antoniou *et al.* 1997), Greece (Barkoulas and Travlos 1998; Panas 2001), eleven African markets (Joe and Menyah 2003), and random sample of world stock markets (De Gooijer 1989; Ammermann and Patterson 2003). The above stylized fact of stock returns is hardly surprising as Antoniou *et al.* (1997) and Sarantis (2001) listed several possible factors that might induce significant non-linearity in stock markets. Among them are difficulties in executing arbitrage transactions, market imperfections, irrational investors' behaviour, diversity in agents' beliefs, and heterogeneity in investors' objectives. However, from our survey on the literature of the Malaysian stock market, it was found that the issue of non-linearity did not receive much attention from researchers in their empirical work. This was a shock finding since the first evidence of non-linearity in stock returns was reported by Hinich and Patterson (1985) 20 years back. It could be that Malaysian researchers were not aware of the profound implications resulting from the existence of non-linearity on their empirical analysis or little testing has been done due to lack of computer codes to implement the tests (Patterson and Ashley 2000: 1). These two possibilities motivate the writing of the present paper.

IMPLICATIONS OF NON-LINEARITY

To raise the awareness of Malaysian researchers, this paper provides a brief discussion on the implications of non-linearity on empirical analysis. Generally, testing for non-linearity can be viewed as a general test of model adequacy for linear models (Hinich and Patterson 1989). In this regard, the existence of non-linearity calls into question the adequacy of linear models, and hence invites the development of non-linear time series models. On the theoretical front, there has been an emergence of non-linear models over the past two decades to capture the complex features of financial time series and subsequently provide more superior forecasts than their linear counterparts or the naïve random walk. The growth in this area is indeed phenomenal with literally unlimited numbers of non-linear models being documented in extant literature. Those that have generated much attention from researchers include the Generalized Autoregressive Conditional Heteroskedasticity (GARCH) models (for recent survey, refer to Engle 2002; Li *et al.* 2002) and Smooth Transition Autoregressive

(STAR) models (a survey of recent developments is provided by van Dijk *et al.* 2002).

On the empirical front, the existence of non-linearity casts doubt on the robustness of empirical results and statistical inferences drawn from linear methods. In this regard, several studies have demonstrated the weaknesses of those popular time series tests that are constructed on the basis of linear autoregressive models, such as the stationarity tests, the causality and cointegration tests, under those circumstances when the underlying generating process is non-linear in nature. Sarno (2000), Kapetanios *et al.* (2003) and Liew *et al.* (2004) illustrated that the adoption of linear stationarity tests are inappropriate in detecting mean reversion if the true data-generating process is in fact a stationary non-linear process. The empirical findings of Sarantis (2001) highlighted the risk of drawing wrong inferences on causal relationships when non-linearity is ignored and non-causality tests based on linear models are employed. The Monte Carlo simulation evidence in Bierens (1997) indicated that the standard linear cointegration framework presents a mis-specification problem when the true nature of the adjustment process is non-linear and the speed of adjustment varies with the magnitude of the disequilibrium. All the aforementioned studies highlight the fact that it is imperative to test for non-linearity to determine the nature of the underlying series before deciding on the appropriate empirical methods. If non-linearity prevails, then non-linear methods should be employed in subsequent empirical analysis. To date, progress in this area has been encouraging, with more advanced statistical tools being developed such as the non-linear stationarity tests (Sarno 2001; Chortareas *et al.* 2002; Kapetanios *et al.* 2003), non-linear causality tests (Baek and Brock 1992; Brooks and Hinich 1999; Skalin and Teräsvirta 1999), non-parametric cointegration tests (Bierens 1997; Breitung 2002) and non-linear cointegration test (Kapetanios 2003). However, existing studies involving the Malaysian stock market have yet to adopt the above research framework.

In the literature on the Malaysian stock market, one of the most active research areas focuses on the investigation of her informational efficiency in terms of weak-form. Browsing through prior work reveals that the empirical evidence is inconclusive. On the one hand, most studies reported the market is weak-form

efficient, for instance, Barnes (1986), Laurence (1986), Saw and Tan (1989), Annuar *et al.* (1991, 1993), Kok and Lee (1994) and Kok and Goh (1995). On the other hand, empirical evidence of inefficiency cannot be suppressed, which is documented in Yong (1989, 1993). Another recent study by Lai *et al.* (2003) using the variance ratio test also reveals the non-randomness of successive price changes in *Bursa Malaysia*. Though the empirical results on the Malaysian stock market are mixed, one notable similarity of all the aforementioned studies is the application of standard statistical tests- serial correlation test, runs test, variance ratio test and unit root tests, to uncover linear serial dependencies or autocorrelation in the data. However, the lack of linear dependencies does not imply that the series are random as there might be other more complex forms of dependencies which cannot be detected by these standard methodologies. A possible hidden pattern that went undetected in earlier studies is that of the non-linear dependency structure. Even the influential paper of Fama (1970: 394) acknowledged this possibility, "Moreover, zero covariances are consistent with a fair game model, but as noted earlier, there are other types of nonlinear dependence that imply the existence of profitable trading systems, and yet do not imply nonzero serial covariances."

The prevalence of non-linearity in stock markets has at least two important implications on the weak-form efficient market hypothesis (EMH). Firstly, the existence of non-linearity implies the potential of predictability in stock returns (Antoniou *et al.* 1997; Patterson and Ashley 2000). In this regard, the empirical work of Andrada-Félix *et al.* (2003) has demonstrated the profitability of non-linear trading rules. Furthermore, in testing the primary hypothesis that graphical technical analysis methods may be equivalent to non-linear forecasting methods, Clyde and Osler (1997) found that technical analysis works better on nonlinear data than on random data, and the use of technical analysis can generate higher profits than a random trading

strategy if the data generating process is non-linear. This finding of non-linear predictable patterns would certainly be at odds with the weak-form EMH, which postulates that even non-linear combinations of previous prices are not useful predictors of future prices (Brooks 1996; Brooks and Hinich 1999; McMillan and Speight 2001). Secondly, those conventional linear statistical tests based on autocorrelation coefficients and runs tests are not capable of capturing non-linearity, as they are designed to uncover linear patterns in the data. Specifically, if the returns generating process is non-linear and a linear model is used to test for efficiency, then the hypothesis of no predictability may be wrongly accepted (De Gooijer 1989; Hsieh 1989; Antoniou *et al.* 1997; Joe and Menyah 2003; Liew *et al.* 2003). It is possible then that those favourable evidences of efficiency in the Malaysian stock market are the outcome of using linear models in markets characterized by inherent non-linearity, and hence the findings should be met with a dose of scepticism. Given the profound implications of non-linearity on model adequacy and its subsequent statistical inferences in various aspects of financial applications², the present study attempts to document the existence of non-linearity in the Malaysian stock market.

EMPIRICAL TESTS FOR NON-LINEARITY

In the literature, there is a wide variety of tests designed to detect non-linearity³, each developed to serve as diagnostic test procedure to identify the presence of varying forms of nonlinear structure which are undetected by conventional time series techniques. Barnett and Serletis (2000) highlighted that none of the tests for non-linearity completely dominates the others. This is supported by the Monte Carlo experiments conducted by Ashley *et al.* (1986), Ashley and Patterson (1989), Hsieh (1991), Liu *et al.* (1992), Lee *et al.* (1993), Brock *et al.* (1996), Barnett *et al.* (1997) and Ashley and Patterson (2001). In this case, the available non-linearity tests can be utilized in a complementary

² Besides the empirical work on market linkages and weak-form efficiency discussed earlier, the implications of non-linearity on other financial applications are no lesser. For instance, pricing derivative securities such as options and futures with martingale methods may not be appropriate. Statistical inferences concerning asset pricing models based on standard testing procedures may no longer be valid. On the theoretical level, it invites the development of non-linear pricing models to account for non-linear behaviour.

³ Barnett and Serletis (2000) and Patterson and Ashley (2000) provided a review of those non-linearity tests that are widely employed in the literature.

way, rather than competing. Several studies have advocated that the application of a battery of non-linearity tests in a sequential way can provide deeper insight into the nature of non-linear generating mechanism of a time series (see, for example, Barnett *et al.* 1995, 1997; Barnett and Serletis 2000; Ashley and Patterson 2001).

Among those existing tests for non-linearity, the most popular one is the Brock-Dechert-Scheinkman (BDS) test developed by Brock *et al.* (1987). This test has been extensively employed by researchers for the detection of non-linearity in financial time series data (see, for example, Hsieh 1989, 1991; Scheinkman and LeBaron 1989; De Grauwe *et al.* 1993; Steurer 1995; Brooks 1996; Al-Loughani and Chappell 1997; Mahajan and Wagner 1999; Opong *et al.* 1999; Serletis and Shintani 2003). Though the sampling distribution of the BDS test statistic is not known, either in finite samples or asymptotically, under the null of non-linearity, it is possible to use the BDS test to produce a test of linearity against the broad alternative of non-linearity. In particular, after the linear structure has been removed by fitting the best possible linear model, the BDS test can then be used to test the residuals for remaining non-linear dependence. The issue that needs to be addressed is whether such a method of linear filtering will change either the asymptotic or the finite sample distribution of the BDS test statistic. Brock (1987) proved that using residuals in linear models instead of raw data does not alter the asymptotic distribution of the BDS test statistic. The simulation results in Hsieh (1991) provided further support. In practice, to remove the linear structure in the data, the class of ARIMA or Box-Jenkins models can be used to fit a linear model to a time series. According to Barnett *et al.* (1995: 304), filtering out all possible linear possibilities with certainty is difficult, but nevertheless pre-filtering by ARIMA fit is often viewed as a reputable means of pre-whitening. However, for simplicity, the AR(p) model has been widely used in the literature for filtering linear dependence from time series data prior to testing for non-linearity (see, for example, Hsieh 1989, 1991; Steurer 1995; Brooks 1996; Barkoulas and Travlos 1998; Opong *et al.* 1999; Mahajan and Wagner 1999). Brooks (1996: 309)

justified the use of this simplified autoregressive procedure, arguing that the process of log differencing has already removed the unit root in the series, and since any moving average model can also be represented by an infinite order autoregression, the class of possible linear specifications is restricted to those of an autoregressive form. Though applying the BDS test to the residuals of a filtered data will give strong support for the conclusion of non-linearity⁴, it conveys very little information as to what kind of non-linear process that generated the data. This is because the BDS test has great power against vast class of non-linear processes (Hsieh 1991; Barnett *et al.* 1997; Ashley and Patterson 2001). With high power against such a vast class of alternatives, the BDS test can only be used as a "non-linearity screening test". In fact, this is the limitation of previous studies that only provide evidence of non-linearity, assuming at the outset that the non-linearity takes a particular form.

Another popular non-linear test is the Hinich bispectrum test (Hinich 1982), which involves estimating the bispectrum of the observed time series (for empirical applications, see, for example, De Grauwe *et al.* 1993; Abhyankar *et al.* 1995; Brooks 1996; Vilasuso and Cunningham 1996; Ammermann and Patterson 2003; Lim *et al.* 2003a). Unlike the BDS test, the Hinich bispectrum test provides a direct test for a non-linear generating mechanism, irrespective of any linear serial dependencies that might be present. Thus, pre-whitening is not necessary in using the Hinich approach. Even if pre-whitening is done anyway, the adequacy of the pre-whitening is irrelevant to the validity of the test. Ashley *et al.* (1986) presented an equivalence theorem to prove that the Hinich linearity test statistic is invariant to linear filtering of the data, even if the filter is estimated. Thus, the linearity test can be applied to the original returns series, or to the residuals of a linear model with no loss of power. In terms of implementation, the bispectrum test produces a test statistic having known asymptotic sampling distribution under the respective null hypotheses of linearity and Gaussianity. However, the alternative hypothesis is not as broad as that for the BDS test. With the bispectrum test, the alternative hypothesis is all

⁴ Rejection of the null of 'independent and identical distribution' (i.i.d.) indicates the presence of non-linearity (since linear dependence has been filtered out), while the non-rejection implies no evidence of non-linearity.

non-linear processes having non-flat bispectrum. In other words, the bispectrum test has no power against those forms of non-linearity that display flat bispectrum and non-flat higher order polyspectra (Barnett *et al.* 1997). Thus, this approach appears to have limitations when the data fails to reject the null of linearity. Failure of rejection does not imply the acceptance of linearity for it might be due to some non-linear processes against which the bispectrum test has low power. Thus, a further test is needed in this case to determine the presence of non-linearity.

To overcome the above-mentioned limitations, both the BDS and Hinich bispectrum test can be used in a complementary, rather than competing way. Moreover, the application of both the BDS and Hinich bispectrum tests in a sequential way can provide a deeper insight into the types of non-linear processes (Barnett *et al.* 1995, 1997; Barnett and Serletis 2000; Ashley and Patterson 2001). In this study, the differing power of the BDS and Hinich bispectrum tests in detecting GARCH-type models is utilized as an alternative framework for determining the adequacy of GARCH models for the data generating process of the series under study. Specifically, the low power of the Hinich bispectrum test relative to the BDS test for the GARCH-type models suggests that the bispectrum test is useful as a marker for these GARCH models. This is supported by the Monte Carlo experiments conducted by Barnett *et al.* (1997) in which the bispectrum test wrongly accepts linearity for data simulated from the ARCH and GARCH models. The fact that the Hinich bispectrum test has low power against ARCH and GARCH is well acknowledged in the literature (see, for example, Hsieh 1989; Brooks 1996).

In addition to the modest contribution of detecting non-linearity in the Malaysian stock market as mentioned earlier, the present study illustrates the applications of two popular non-linearity tests, that is, the BDS and Hinich bispectrum tests. The lack of computer codes should not be a cause of concern for researchers since they are made available by the developers in their respective web page. For the BDS test, the code written for DOS-based computers was

first provided by W.D. Dechert in his web page⁵. Later, B. LeBaron shared the source code in the C programming language⁶, and provided a brief description of the BDS algorithms in LeBaron (1997). In a recent development, the BDS test has been incorporated in the statistical package of *EViews*, starting from version 4.0. The bispectrum test, on the other hand, is available from the personal web page of M.J. Hinich⁷.

The application of both the BDS and bispectrum tests not only provides empirical evidence of non-linearity, but serves as an alternative framework for determining the adequacy of GARCH-type models in characterizing the underlying data-generating process for the series under study. This issue is of great importance to the field of finance in view of the wide applications of GARCH models in understanding the relationship between risk and expected returns, particularly in the areas of asset pricing, portfolio selection and risk management. In the existing literature, the non-rejection by the BDS test on the standardized residuals of a GARCH model has been taken as evidence that the GARCH model 'fits' the data (see, for example, Hsieh 1989, 1991; Krager and Kugler 1993; Abhyankar *et al.* 1995; Opong *et al.* 1999; McMillan and Speight 2001; Caporale *et al.* 2005). Another popular framework to examine the validity of specifying a GARCH error structure is the Hinich portmanteau bicorrelation test (see, for example, Hinich and Patterson 1995; Brooks and Hinich 1998; Brooks *et al.* 2000; Lim *et al.* 2003b).

In following sections, the paper reviews some major development in the Malaysian stock market, describes the data and procedures. The results are then summarized and used to draw conclusions and implications.

THE MALAYSIAN STOCK MARKET

In Malaysia, the Kuala Lumpur Stock Exchange (KLSE) is the only body approved by the Ministry of Finance, under the provisions of the Securities Industry Act, 1983, as the stock exchange in the country. The KLSE is a self-regulatory organization with its own memorandum and articles of association, as well as rules which govern the conduct of its members in securities dealings.

⁵ The URL is <http://dechert.econ.uh.edu/>.

⁶ The URL for B. LeBaron's web page is <http://people.brandeis.edu/~blebaron/>.

⁷ The URL is <http://www.gov.utexas.edu/hinich>.

The KLSE is also responsible for the surveillance of the market place, and for the enforcement of its listing requirements which spell out the criteria for listing, disclosure requirements and standards to be maintained by listed companies.

Although the history of KLSE can be traced to the 1930s, public trading of shares in Malaysia only began in 1960 when the Malayan Stock Exchange (MSE) was formed. When the Federation of Malaysia was formed in 1963, with Singapore as a component state, the MSE was renamed the Stock Exchange of Malaysia (SEM). With the secession of Singapore from the Federation of Malaysia in 1965, the common stock exchange continued to function but as the Stock Exchange of Malaysia and Singapore (SEMS).

The year 1973 was a major turning point in the development of the local securities industry, for it saw the split of SEMS into The Kuala Lumpur Stock Exchange Berhad (KLSEB) and the Stock Exchange of Singapore (SES). The split was opportune in view of the termination of the currency interchangeability arrangements between Malaysia and Singapore. Although the KLSEB and SES were deemed to be separate exchanges, all the companies previously listed on the SEMS continued to be listed on both exchanges.

When the Securities Industry Act 1973 was brought into force in 1976, a new company called the Kuala Lumpur Stock Exchange (KLSE) took over the operations of KLSEB as the stock exchange in Malaysia, to provide a central market place for buyers and sellers to transact business in shares, bonds and various other securities of Malaysian listed companies. On 1 January 1990, following the decision on the "final split" of the KLSE and SES, all Singapore-incorporated companies were delisted from the KLSE and vice-versa for Malaysian companies listed on the SES.

The year 2004 represents another major milestone in the development of the Malaysian securities industry with the demutualisation of KLSE. The demutualisation process took place with the passing of the Demutualisation Bill by the Dewan Rakyat on 11 September 2003, together with other related amendments to the securities law. This was followed by the passing of the Bill by the Dewan Negara on 5 November 2003. As a result of the exercise, KLSE ceases to be a non-profit entity limited by the guarantee of its members, and becomes a public company limited by shares. On 20 April 2004, KLSE was officially

renamed *Bursa Malaysia*, and there is no abbreviation or translation for its usage since it is a brand name for the exchange.

The KLSE computes an index for each of the main sectors traded on the bourse—industrial, finance, property, tin and plantation sectors—and the second board. However, the most widely followed, by far, is the Kuala Lumpur Composite Index (KLCI). The KLCI was introduced in 1986 after it was found that there was a need for a stock market index which would serve as a more accurate indicator of the performance of the Malaysian stock market and the economy. At that time, there was effectively no index which represented the entire market. The KLCI satisfies stringent guidelines and was arrived at only after rigorous screening of the component companies that were eventually selected to compose the index. In 1995, the number of component companies was increased to 100 and will be limited to this number although the actual component companies may change from time to time. The KLCI is constructed by using the value weighted average method, where the weight used is the price of the stock multiplied by the number of ordinary shares outstanding.

METHODOLOGY

In this paper, the BDS test, as the first run test, is applied to the residuals of a pre-filtered linear model. If the null of 'independent and identical distribution' (i.i.d.) cannot be rejected, there is little point in continuing, since the BDS test provides strong evidence against the presence of non-linearity. If the null is instead rejected, the Hinich bispectrum test can then be used to permit the class of relevant non-linearity to be narrowed. In particular, the Hinich bispectrum test is useful as a marker for the GARCH-type models. Since linearity has been ruled out by the BDS test, the non-rejection of the null by the Hinich bispectrum test might be due to the presence of non-linear processes which the Hinich test has low power against, specifically the GARCH-type models (Hsieh 1989; Brooks 1996; Barnett *et al.* 1997). On the other hand, rejection of the null hypothesis by the Hinich bispectrum test provides evidence against the adequacy of GARCH-type models for the series under study. In other words, the series are more likely being generated by a non-linear process that is of a form in addition to, or instead of GARCH-type.

The Data

In this study, we utilize the daily closing values of the Kuala Lumpur Composite Index (KLCI) obtained from the *Daily Diary at Bursa Malaysia* for the sample period of 2/1/90 to 31/10/2001.

The price series obtained from the database are used to compute a set of continuously compounded percentage returns for the KLCI, using the relationship:

$$r_t = 100 * \ln(P_t/P_{t-1}) \tag{1}$$

where P_t is the closing price of the stock on day t , and P_{t-1} the rate on the previous trading day.

One possible justification for using returns rather than raw data is that the raw data is likely to be non-stationary. Stationarity is a pre-requisite for both the BDS and Hinich bispectrum tests. Hsieh (1991) pointed out that non-stationarity in the data series can cause a rejection of the null hypothesis of independent and identical distribution (i.i.d.) on the basis of the BDS test. On the other hand, non-stationarity may cause a spurious rejection of the null of linearity in the bispectrum test (Hinich and Patterson 1985).

Brock-Dechert-Scheinkman (BDS) Test

Brock, Dechert and Scheinkman (Brock *et al.* 1987) developed a statistical test and the BDS statistic. The original BDS paper took the concept of the correlation integral⁸ and transformed it into a formal test statistic which is asymptotically distributed as a normal variable under the null hypothesis of independent and identically distributed (i.i.d.) against an unspecified alternative. In principle, no distributional assumption on the underlying data generating process is needed in using the BDS test as a test statistic for i.i.d. random variables. Though the estimation is non-parametric, the test statistic is asymptotically distributed as a standard normal variable, with zero mean and unit variance. Hence, the significance of the test statistic is readily determined from standard normal tables. A revision of this original paper has been done in Brock *et al.* (1996).

The BDS test is based on the correlation integral as the test statistic. Given a sample of i.i.d. observations, $\{x_t; t = 1, 2, \dots, n\}$, Brock *et al.* (1987, 1996) showed that:

$$W_{m,n}(\epsilon) = \sqrt{n} \frac{T_{m,n}(\epsilon)}{V_{m,n}(\epsilon)} \tag{2}$$

has a limiting standard normal distribution, where $W_{m,n}(\epsilon)$ is the BDS statistic. n is the sample size, m is the embedding dimension, and the metric bound, ϵ , is the maximum difference between pairs of observations counted in computing the correlation integral. $T_{m,n}(\epsilon)$ measures the difference between the dispersion of the observed data series in a number of spaces with the dispersion that an i.i.d. process would generate in these same spaces, that is $C_{m,n}(\epsilon) - C_{I,n}(\epsilon)^m$. $T_{m,n}(\epsilon)$ has an asymptotic normal distribution with zero mean and variance $V_m^2(\epsilon)$.⁹

This BDS test has an intuitive explanation. The correlation integral $C_{m,n}(\epsilon)$ is an estimate of the probability that the distance between any two m -histories, $x_t^m = (x_t, x_{t+1}, \dots, x_{t+m-1})$ and $x_s^m = (x_s, x_{s+1}, \dots, x_{s+m-1})$ of the series $\{x_t\}$ is less than ϵ , that is, $C_{m,n}(\epsilon) \rightarrow \text{prob}\{|x_{t+i} - x_{s+i}| < \epsilon, \text{ for all } i = 0, 1, \dots, m-1\}$, as $n \rightarrow \infty$.

If the series $\{x_t\}$ are independent, then, for

$$|t-s| > m, C_{m,n}(\epsilon) \rightarrow \prod_{i=0}^{m-1} \text{prob}\{|x_{t+i} - x_{s+i}| < \epsilon\}, \text{ as } n \rightarrow \infty.$$

Furthermore, if the series $\{x_t\}$ are also identically distributed, then $C_{m,n}(\epsilon) \rightarrow C_1(\epsilon)^m$, as $n \rightarrow \infty$. The BDS statistic therefore tests the null hypothesis that $C_{m,n}(\epsilon) = C_{I,n}(\epsilon)^m$, which is the null hypothesis of i.i.d.¹⁰

The need to choose the values of ϵ and m can be a complication in using the BDS test. For a given m , ϵ cannot be too small because $C_{m,n}(\epsilon)$ will capture too few points. On the other hand, ϵ cannot be too large because $C_{m,n}(\epsilon)$ will capture too many points. For this reason, we adopt the approach used by advocates of this test. In particular, we set ϵ as a proportion of standard deviation of the data, σ . Hsieh and LeBaron

⁸ In Grassberger and Procaccia (1983), the correlation integral was introduced as a measure of the frequency with which temporal patterns are repeated in the data. For example, the correlation integral $C(\epsilon)$ measures the fraction of pairs of points of a time series $\{x_t\}$ that are within a distance of ϵ from each other.

⁹ $V_m(\epsilon)$ can be estimated consistently by $V_{m,n}(\epsilon)$. For details, refer to Brock *et al.* (1987, 1996).

¹⁰ The null of i.i.d. implies that $C_{m,n}(\epsilon) = C_{I,n}(\epsilon)^m$ but the converse is not true.

(1988a, b) have performed a number of Monte Carlo simulation tests regarding the size of the BDS statistics under the null of i.i.d. and the alternative hypotheses. The Monte Carlo evidence showed that the 'best' choice of ϵ is between 0.50 and 1.50 times the standard deviation.

On the other hand, at our chosen setting of ϵ , we produce the BDS test statistics, $W_{m,n}(\epsilon)$ for all settings of embedding dimensions from 2 to 5. Though most researchers computed the BDS statistics for embedding dimensions varying from 2 to 10 (see, for example, Hsieh 1989; De Grauwe *et al.* 1993; Brooks 1996; Mahajan and Wagner 1999; Opong *et al.* 1999), it is important to take note that the small samples properties of BDS test degrade as one increases the embedding dimension. Specifically the Monte Carlo simulations in Brock *et al.* (1991) demonstrated that as the dimension goes beyond 5, the small samples properties of BDS degrade, mainly due to the reduction of non-overlapping observations as m grows. Thus, only BDS test statistics for embedding dimensions of 2 to 5 are given much consideration in this study.

Hinich Bispectrum Test

Hinich (1982) laid out a statistical test for determining whether an observed stationary time series $\{x_t\}$ is linear. It is possible that $\{x_t\}$ is linear without being Gaussian, but all of the stationary Gaussian time series are linear. The Hinich (1982) test involves estimating the bispectrum of the observed time series to test for the null hypothesis of Gaussianity and linearity.

In this section, we provide a brief description of the testing procedures presented by Hinich (1982). Let $\{x_t\}$ denote a third order stationary time series, where the time unit t is an integer. The third-order cumulant function of $\{x_t\}$ in the time domain is defined to be $C_{xxx}(r, s) = E[x_{t+r}x_{t+s}x_t]$ for each (r, s) when $E[x_t] = 0$, in which $s \leq r$ and $r = 0, 1, 2, \dots$

Since third-order cumulants are hard to interpret, and their estimates are even harder to fathom, the bispectrum in the frequency domain is calculated, which is the double Fourier transform of the third-order cumulant (or bicovariance) function.

The bispectrum at frequency pair (f_1, f_2) , denoted as $B_{xxx}(f_1, f_2)$, is the double Fourier transform of $C_{xxx}(r, s)$:

$$B_{xxx}(f_1, f_2) = \sum_{r=-\infty}^{\infty} \sum_{s=-\infty}^{\infty} C_{xxx}(r, s) \exp[-i2\pi(f_1r + f_2s)] \quad (3)$$

assuming that $|C_{xxx}(r, s)|$ is summable. The symmetries of $C_{xxx}(r, s)$ translate into symmetries of $B_{xxx}(f_1, f_2)$ that yield a principal domain for the bispectrum, which is the triangular set $\Omega = \{(f_1, f_2): 0 < f_1 < 1/2, f_2 < f_1, 2f_1 + f_2 < 1\}$.

The use of the bispectrum has an intuitive explanation. If $\{x_t\}$ is linear and Gaussian, the bispectrum is flat at zero over all frequencies $(f_1, f_2) \in \Omega$. However, if $\{x_t\}$ is linear but not Gaussian, then the bispectrum is non-zero, and is instead a constant independent of frequency. Hence, if the bispectrum is non-constant and a function of frequency, then a non-linear process is implied. In this regard, Brillinger (1965) proved that once a consistent estimator of the bispectrum is calculated, linearity and Gaussianity tests can be performed.

Instead of estimating the bispectrum as given in Equation (3), Hinich (1982) provided an equivalent approach that yields a consistent estimator of the bispectrum. Suppose we have a sample of N observations: $\{x_0, x_1, \dots, x_{N-1}\}$. Let $f_c = c/N$ for $c = 0, 1, \dots, N - 1$. For each pair of integers j and k , define:

$$F(j, k) = X(f_j) X(f_k) X^*(f_{j+k}) / N \quad (4)$$

where $X(f_c) = \sum_{t=0}^{N-1} x_t \exp(-i2\pi f_c t)$ and $*$ denotes the complex conjugate.

A consistent estimator of the bispectrum is formed by averaging the $F(j, k)$ in a square of M^2 points whose centers are defined by the lattice $L = \{(2m-1)M/2, (2e-1)M/2: m = 1, \dots, c \text{ and } m \leq N/2M - c/2 + 3/4\}$ in the principal domain. For squares that lie completely inside the principle domain, a consistent estimator of the bispectrum is:

$$\hat{B}_{xxx}(f_m, f_n) = M^{-2} \sum_{j=(m-1)M}^{mM-1} \sum_{k=(n-1)M}^{nM-1} F(j, k) \quad (5)$$

If a square has points outside the principal domain, those points are not included in the average. $\hat{B}_{xxx}(f_m, f_n)$ is a consistent and asymptotically complex normal estimator of the bispectrum $B_{xxx}(f_1, f_2)$ in Equation (3) if the sequence (f_m, f_n) converges to (f_1, f_2) .

One important consideration in the estimation of bispectrum is the parameter M , the frame size. The choice of M governs the trade-off between the bias and variance of the estimator. In this regard, the larger (smaller) the M , the smaller (larger) the finite sample variance, but the larger (smaller) the sample bias. Due to this trade-off, there is no unique value for M . Hinich (1982) and Ashley *et al.* (1986) recommended the upper bound value of M should be $M = N^{1/2}$. In this study, we set M equal to 25.¹¹

The estimated standardized bispectrum is given by $2|\hat{X}(f_m, f_n)|^2$, where

$$\hat{X}(f_m, f_n) = \frac{\hat{B}_{xxx}(f_m, f_n)}{[N/M^2]^{1/2} [\hat{S}_{xx}(g_m)\hat{S}_{xx}(g_n)\hat{S}_{xx}(g_{m+n})]^{1/2}} \quad (6)$$

where $g_u = (2u-1)M/2N$ for each integer u .

The $\hat{S}_{xx}(\cdot)$ in Equation (6) are estimates of the regular power spectrum, which is the Fourier transform of the second-order moment (or autocovariance) and is a function of only one frequency. The power spectrum of $\{x_t\}$ at frequency g is given by:

$$S_{xx}(g) = \sum_{s=-\infty}^{\infty} C_{xx}(s) \exp[-2\pi igs] \quad (7)$$

where $C_{xx}(s) = E[x_{t+s}x_t]$ is the second-order moment or autocovariance function.

Once again, Gaussianity and linearity of $\{x_t\}$ are tested through the null hypotheses that the estimated standardized bispectrum is zero over all frequencies (f_m, f_n) and that the bispectrum is constant over all frequencies respectively. Though the bispectrum has been understood for at least 40 years dated back to the paper by Hasselman *et al.* (1963), the absence of statistical tests for significance of bispectrum estimates was identified as one of the problems that have severely limited its progress. In this regard, Hinich

(1982) provided a streamlined and practical procedure that utilizes the asymptotic properties of the bispectrum estimator, with the test statistics for both hypotheses reduced to:

$$\hat{Z} = 2 \sum_m \sum_n |\hat{X}(f_m, f_n)|^2 \quad (8)$$

Under the null hypothesis of Gaussianity, the test statistic is distributed asymptotically as a standard normal. On the other hand, under the null of linearity, the test statistic is distributed approximately as a χ^2 random variable with two degrees of freedom. Hinich (1982) and Ashley *et al.* (1986) recommended the use of the 80 percent quantile of the empirical distribution, scaled by a function of the variance of the series, to provide asymptotically standard normal variable. However, in this study, we use 90 percent quantile to get a more plausible result instead of the 80 percent.¹²

RESULTS AND ANALYSIS

Descriptive Statistics

Table 1 provides summary statistics for the returns series in order to get a better view of some of the important statistical features. The means are quite small. The KLCI returns series exhibit some degree of positive or right-skewness. On the other hand, the distributions of returns for all the series are highly leptokurtic, in which the tails of its distribution taper down to zero more gradually than do the tails of a normal distribution. Not surprisingly, given the non-zero skewness levels and excess kurtosis demonstrated within these series of returns, the Jarque-Bera (JB) test strongly rejects the null of normality.

Unit Root Tests

One area that deserves our attention is the stationarity of the returns series, which is a prerequisite for both the BDS and Hinich bispectrum tests. The results from the Augmented Dickey Fuller (ADF) test in Table 2 show that the null hypothesis of a unit root can be rejected for KLCI returns series, which is the

¹¹ Hinich recommended a reduction in the frame size to 25 for our sample sizes in order to improve the power of the test.

¹² In a personal communication, Hinich recommended the use of 90 percent quantile.

TABLE 1
Summary statistics for KLCI returns series

	KLCI
Sample Period	2/1/1990-31/10/2001
No. of observations	3087
Mean	0.002107
Median	0.000000
Maximum	20.81737
Minimum	-24.15339
Std deviation	1.715348
Skewness	0.460844
Kurtosis	36.89786
JB normality test statistic (<i>p</i> -value)	147907.7 (0.000000)*

* Denotes very small value

first difference of the price series of KLCI, even at the 1% level of significance. Similar conclusions are made based on the results of Phillips-Perron (PP) test summarized in the same table. Thus, the results indicate that the transformed returns series of KLCI do not contain a unit root and thus are stationary.

Testing for Independence and Identical Distribution

We apply the BDS test on the KLCI returns series in order to test whether these returns series are independent and identically distributed. Table 3 reports the results of the BDS test. The BDS statistics, $W_{m,n}(\epsilon)$, are calculated for all combinations of m and ϵ where $m = 2, 3, \dots, 10$ and $\epsilon = 0.50\sigma, 0.75\sigma, 1.00\sigma, 1.25\sigma$ and 1.50σ , with a total of 45 combinations. Although we report the results with embedding dimensions varying from 2 to 10, the results with embedding dimensions of 2 to 5 should be given the most serious consideration. This is because the small samples properties of BDS degrade as one increases the dimension. Specifically, as one gets

beyond $m=5$, the small sample properties are not very good (in terms of normal approximations) at sample sizes comparable to ours.

It is obvious that the BDS statistics generated all lie in the extreme positive tail of the standard normal distribution. Specifically, all of the values are significant at least at the 5% level of significance, especially at the suggested dimensions of 2 to 5. According to Brock *et al.* (1991), the large BDS statistics can arise in two ways. It can either be that the finite sample distribution under the null of i.i.d. is poorly approximated by the asymptotic normal distribution, or the BDS statistics are large when the null hypothesis of i.i.d. is violated. From the various Monte Carlo simulations, Brock *et al.* (1991) ruled out the first possibility, thus suggesting that our large BDS statistics in Table 3 provide strong evidence of departure from the i.i.d. null. In other words, these results indicate that the KLCI returns series are not truly random since some patterns show up more frequently than would be expected in a truly random series.

TABLE 2
Unit root test results for KLCI

	Level	First Difference
	Trend	No Trend
Augmented Dickey Fuller (ADF)	-2.07(53)	-6.66(52)**
Philips-Perron (PP)	-1.61(8)	-51.66(8)**

Notes: The null hypothesis is that the series contains unit root. The critical values for rejection are -3.97 for models with a linear time trend and -3.43 for models without a linear time trend at a significant level of 1% (**). Values in brackets indicate the chosen lag lengths.

TABLE 3
BDS test results on KLCI returns series

<i>m</i>	ϵ				
	0.50	0.75	1.00	1.25	1.50
2	3.90	3.20	2.66	2.19	1.82*
3	5.72	4.53	3.64	2.95	2.42
4	7.45	5.73	4.45	3.50	2.83
5	9.72	7.18	5.35	4.07	3.21
6	12.70	8.91	6.35	4.66	3.59
7	16.50	10.96	7.49	5.30	3.98
8	21.90	13.63	8.83	6.02	4.39
9	29.05	16.90	10.35	6.77	4.82
10	39.45	21.13	12.16	7.62	5.27

Notes: Asymptotically, the computed BDS statistics, $W_{m,n}(\epsilon) \sim N(0,1)$ under the null of i.i.d. The BDS test is taken as a two-tailed test. The critical values are 2.58 and 1.96 for the 1% and 5% levels of significance respectively. All the BDS statistics, except one (with asterisk*) are significant at least at 5% level of significance.

Testing for Non-linearity

In this section, we use both the BDS and Hinich bispectrum tests to detect non-linear departure from the i.i.d. null in the KLCI returns series.

BDS Test

The rejection of the i.i.d. null by the BDS test can be due to non-white linear and non-white non-linear dependence. To make sure that the data is in fact picking up non-linear dependencies, the linear structure has to be removed by fitting the best possible linear model. The BDS test can then be used to test the residuals for remaining non-linear dependencies.

To achieve that, we filtered the data by the following autoregression to account for possible linear dependence:

$$r_t = \beta_0 + \beta_1 D_{M,t} + \beta_2 D_{T,t} + \beta_3 D_{W,t} + \beta_4 D_{TH,t} + \beta_5 D_{Hol,t} + \sum_{i=1}^p \beta_i r_{t-i} + \epsilon_t \quad (9)$$

where $D_{M,t}$, $D_{T,t}$, $D_{W,t}$, $D_{TH,t}$ are dummy variables for Monday, Tuesday, Wednesday and Thursday respectively to capture day-of-the-week effects. $D_{Hol,t}$ is a dummy variable to capture any holiday returns effects, whose values denoted the number

of trading days missed due to holidays since the last day during which trading occurred (excluding weekends). The lag length of the $AR(p)$ terms was chosen so that $Q_n(50)$ test is not significant at the 10% level. It should be emphasized that the objective is not to build a statistically adequate empirical model, but rather to choose an acceptable specification, which will remove autocorrelation effects and linear holiday and day-of-the-week effects from the returns series. For the KLCI returns series, the identified model is $AR(6)$.¹³

After fitting the best possible linear model, the BDS test can then be used to test the residuals for remaining non-linear dependence. Table 4 reports the results of the BDS test on the residuals of the fitted $AR(p)$ model. The results show that the KLCI returns series exhibit highly significant BDS statistics even after autocorrelation effects and linear holiday and day-of-the-week effects have been filtered out, thereby indicating the existence of strong non-linear dependencies within these data series.

However, there is always a worry that the rejection of the null by the BDS test could be due to the possibility of imperfect pre-whitening. This concern is well directed since much of the Monte Carlo research that has been published on the BDS test (see, for example, Brock *et al.*

¹³ For the linear seasonality effects, our regression results show only the presence of Monday effects in the KLCI returns series. Other incorporated dummies are not significant, even at the 10% level of significance.

TABLE 4
BDS test results on residuals of AR(p) fit for KLCI returns series

m	ϵ				
	0.50	0.75	1.00	1.25	1.50
2	3.80	3.09	2.56	2.09	1.78*
3	5.49	4.31	3.48	2.80	2.37
4	7.15	5.50	4.29	3.37	2.80
5	9.40	6.95	5.22	3.95	3.20
6	12.49	8.74	6.26	4.56	3.59
7	16.38	10.83	7.41	5.21	3.98
8	21.85	13.52	8.77	5.92	4.40
9	29.19	16.79	10.31	6.67	4.82
10	39.50	20.93	12.13	7.52	5.28

Notes: Asymptotically, the computed BDS statistics, $W_{m,n}(\epsilon) \sim N(0,1)$ under the null of i.i.d. The BDS test is taken as a two-tailed test. The critical values are 2.58 and 1.96 for the 1% and 5% levels of significance respectively. All the BDS statistics, except one (with asterisk*) are significant at least at 5% level of significance.

1991) has emphasized the pre-testing issue and the potential dependence of the properties of the test on the prior linear filter. Some of the test's sensitivity to non-linearity could be a result of remaining linear dynamics in the data.

Hinich Bispectrum Test

The Hinich bispectrum test is a good complement for the BDS test (Abhyankar *et al.* 1995). This bispectrum test provides a direct test for a non-linear generating mechanism, irrespective of any linear serial dependencies that might be present. Thus, pre-whitening is not necessary in using the Hinich approach. Even if pre-whitening is done the adequacy of the pre-whitening is irrelevant to the validity of this test (Ashley *et al.* 1986).

In this section, the Hinich bispectrum test is applied to both the original KLCI returns series and also the residuals of the AR(p) fit. Table 5 reports the results for the bispectrum Gaussianity

test. It is obvious that the null is strongly rejected, irrespective of whether the returns series or the residuals are employed.

Although Gaussianity and linearity tests are linked, a rejection of Gaussianity does not necessarily rule out linearity. As mentioned earlier, the null of linearity examines whether the estimated standardized bispectrum is constant over all frequencies, whereas Gaussianity requires constant at zero over all frequencies. The linearity test provided by Hinich (1982) is able to detect non-constant bispectrum which suggests a non-linear generating process for the returns series. Table 5 reports the p -value for the 90 percent quantile bispectrum linearity test. The results reject the null hypothesis of a linear generating mechanism at the conventional level of significance for KLCI returns series. These indicate the existence of non-linear dependencies within the daily returns, at least in the form that can be detected by the bispectrum test.

TABLE 5
Gaussianity and linearity test results on KLCI returns series

	KLCI Returns Series	KLCI Returns Series Residuals of AR(p) Fit
Gaussianity Test Results (p -value)	0.0000*	0.0000*
Linearity Test Results (p -value)	0.0228	0.0228

Notes: Both test statistics are distributed as $N(0,1)$ and are taken as a one-sided test.

* Denotes very small value.

CONCLUDING REMARKS

The outcomes of our econometric investigation support the presence of non-linearity in the data generating process of KLCI returns series. In the first run test, the BDS results reveal that there is in fact a non-linear mechanism that drives the returns series under investigation. Subsequent application of the Hinich bispectrum test confirms the results of the earlier BDS test. It is important to note that the rejection of the null of linearity in the bispectrum test is a strong support for the presence of non-linearity (Barnett *et al.* 1997). Moreover, the Hinich bispectrum test is able to provide a direct test for a non-linear generating mechanism, irrespective of any linear serial dependencies that might be present. Consequently, when this test rejects the null, one need not worry about the possibility that the linear pre-whitening model has failed to remove all linear serial dependence in the data (Ashley and Patterson 2001). This has helped us to cast away our worries that the rejection of the null in the BDS test could be due to the possibility of imperfect pre-whitening.

These bispectrum test results, however, do yield additional information beyond merely confirming the results of the earlier BDS test. Since the bispectrum test has relatively low power against GARCH-type models (Hsieh 1989; Brooks 1996; Barnett *et al.* 1997), the results not only suggest the inadequacy of linear models for the underlying KLCI returns series, but provide further insight into the types of non-linear process, or at least determine the adequacy of the GARCH models that are widely employed in the financial world. In particular, the findings reveal that the returns series are more likely being generated by a process that is of a form in addition to, or instead of GARCH-type. Furthermore, the present study has strong implications on the empirical work involving the Malaysian stock market as the existence of non-linearity highlights the risk of drawing wrong inferences from linear methods.

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Why Join an Environmental NGO? A Case Study of the Malaysian Nature Society

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Keywords: Environmental NGO, membership profile, reasons for membership

ABSTRAK

Kekuatan politik sesuatu pertubuhan bukan kerajaan alam sekitar (NGO) bergantung pada banyak faktor termasuklah dana, kepimpinan, kepakaran, sokongan politik dan bilangan keahlian. Jumlah keahlian boleh mempengaruhi kejayaan atau kegagalan pertubuhan tersebut. Lazimnya, keahlian yang banyak bermakna lebih banyak tenaga boleh digunakan untuk aktiviti akar umbi dan juga lebih banyak pendapatan melalui bayaran yuran. Objektif utama kajian ini ialah untuk memahami profil sosioekonomi ahli sesuatu NGO alam sekitar dan mengenal pasti sebab mereka menjadi ahli. Satu borang soal selidik telah dibentuk dan dimuatkan dalam laman web pertubuhan berkenaan selama sebulan. Selain dari itu, ia juga diedarkan semasa Mesyuarat Agung Tahunan pertubuhan berkenaan. Pada akhirnya, sebanyak seratus borang soal selidik yang lengkap diisi telah dipulangkan dan dianalisis. Keputusan menunjukkan sebahagian besar keahlian NGO tersebut terdiri daripada ahli profesional golongan berpendapatan pertengahan yang bekerja di sektor swasta. Mereka mendapat tahu tentang NGO berkenaan daripada rakan yang telah menjadi ahli. Sebahagian besar mereka menjadi ahli kerana ingin memberi sokongan kepada matlamat murni persatuan melindungi alam sekitar melalui aktiviti sukarela. Keputusan ini mencadangkan semasa melancarkan kempen keahlian, NGO berkenaan hendaklah menonjolkan imej yang ia adalah juara dalam perlindungan alam sekitar dan pusat sukarelawan alam sekitar. Keputusan ini menyokong teori yang mengatakan minat bersama ialah satu dari pendorong utama keahlian kumpulan sukarelawan.

ABSTRACT

The political strength of an environmental NGO depends on many factors including funds, leadership, expertise, political support and the size of membership. Membership size can influence the success or failure of the group. Usually, large membership means more labour can be deployed for grass roots activities and also more income through payment of fees. Two main objectives of the study were to understand the socio-economic profiles of members of an environmental NGO and identify their reasons for membership. A questionnaire was developed and made available on-line to all members of the NGO for a period of one month. In addition, it was circulated during the NGO's Annual General Meeting. In the end, one hundred completed questionnaires were returned and analysed. The results revealed that membership of the NGO comprise mainly of young professionals of the middle income group working in the private sector. They learn about the NGO mainly through friends who are members. The majority of them indicated that they joined the NGO because they wanted to support the noble goal of protecting nature through voluntary activities. The results suggest that, in its campaign for membership, the NGO should project an image of a group that champions nature protection as well as a hub for voluntary work. The findings of the study support the theory that common interest is one of the prime motivators of voluntary group membership.

INTRODUCTION

The destruction of the environment has caused alarm and concern among many policy actors be it governmental or non-governmental. In response to this phenomenon, new environmental groups have been formed while the existing ones have widened their focus and scope of activities to include specific aspects of the environment, like the tropical rainforest (Mohd. 1993).

Environmental non-governmental organizations (NGOs) can perform many functions in their quest to influence, directly or otherwise, public policies on the environment. Some of these groups work in conducting research and disseminate the results to the policy-makers and the public. Others organize and conduct seminars, education programmes and expeditions to natural areas in order to create awareness on the importance of the environment and its conservation. For some other groups, they prefer to lobby policy-makers to create policies that promote the enhancement of environmental protection. The more militant groups, on the other hand, are very aggressive in their tactics and they often resort to protests and demonstrations. The activities of these groups, more often than not, compliment the programmes and work of their governmental counterparts.

In Malaysia, a number of environmental NGOs have taken active roles in promoting and safeguarding the healthy condition of the environment. Certain attentive members of the public would have noticed that environmental NGOs, such as the Malaysian Nature Society (MNS), Sahabat Alam Malaysia (SAM) and World Wide Fund for Nature (WWF), have made great strides in their research, education and conservation efforts aimed at promoting a healthy state of the environment, including the natural resources. Through their activities that include organizing international seminars, leading scientific expeditions into the forest, conducting natural resource policy research, and managing natural areas, these groups have proved that they are worthy actors in handling the environmental predicament.

Like any other voluntary organizations, environmental NGOs face many challenges in their quest to promote environmental protection and management in this country. These challenges could be internal as well as external to the organization. Potential internal challenges

include lack of financial resources, expertise, leadership, and membership. While challenges that are outside the organizations may include lack of support and cooperation from the public, the government and politicians, insufficient data and information for decision-making; lack of cooperation and synergy are the challenges among the NGOs themselves. The NGOs need to formulate and implement appropriate steps and measures in order to overcome the various challenges so that they can continue to be recognized as a strong force in the battle to safeguard the environment.

NGOs must have adequate resources not only to support themselves but also to influence public policy. Membership and funds are two important organizational and political resources. The availability of funds and large membership determine the strength and authority of the NGOs and imposes constraints on the scope and nature of their activities. Also, in order to effectively influence public policies, NGOs must have skilled leadership, substantive expertise, political expertise, and favourable reputation (Ornstein and Elder 1978).

Members are important assets to NGOs for several reasons. First, members are a source of income to the organizations. The fees that members pay for joining and maintaining membership form a significant portion of the total funds of the organizations. Second, membership of NGOs can provide voluntary assistance for field activities. Third, members can serve as local watchdogs, and fourth, they can act as sources of authority in dealing with government. Finally, members help to disseminate information and messages at the grass-roots (Lowe and Goyder 1983).

WHY DO INDIVIDUALS JOIN ENVIRONMENTAL GROUPS?

Several theories have been put forward to explain the reasons individuals join environmental groups. Among these include the Disturbance Theory (Truman 1971), Collective Action Theory (Olson 1965), and Illogic of Collective Action (Mitchell 1979).

According to Truman (1971), environmental NGOs are formed in response to a 'disturbance' in a society which is otherwise in an equilibrium condition. The destruction of the environment disturbs the equilibrium; the main objective of the newly formed group is to restore the

equilibrium. The shared interest of the members, which in this context is environmental protection, is the main force driving individuals to join the groups.

The Disturbance Theory postulates that individuals join environmental groups simply because they share the same aspirations or attitudes of other members of the groups. Society, according to Truman, is made up of naturally occurring neighbourhood, work, ethnic, religious and other groups. Individuals who share the attitudes or skills of these groups would join to become their members. According to this pluralist theory of interest groups, individuals concerned with the rapid disappearance of tropical forests, for example, are more likely to join a group that works on programmes to conserve and protect the rainforests than any other type of groups.

Olson (1965), however, argues that collective or shared interest is not the main factor that attracts individuals to join environmental groups. Individuals are not willing to pay for the benefits which non-payers can also enjoy. Therefore, individuals are more likely to free ride and expect other individuals to pay for environmental protection.

The main premise of Olson's argument is that individuals are autonomous and seek to maximize their own material well-being. Accordingly, individuals would join environmental groups only if they can gain benefits through their association. Benefits that they can enjoy through membership can be private or collective in nature. Private benefits are those benefits that are enjoyed by members only (eg. discount hotel rates, glossy magazines, etc), while the collective ones include benefits that can be enjoyed by members and non-members as well (eg. clean air, unpolluted rivers, etc).

Since members as well as non-members can enjoy collective goods, Olson argues that it is the private benefits that attract individuals to join an environmental groups. Due to the fact that collective goods are available to everybody, the rational utility-maximising individual, it is argued, will not be inclined to help achieve a group benefit which will then be enjoyed equally by all those who do not contribute. He or she will be inclined to take a free ride. This theory further says that an individual will only decide to join environmental group if the private benefits outweigh the costs of joining.

Mitchell (1979) suggested another theory that can explain why individuals join environmental groups. Essentially, Mitchell disagrees with Olson in saying that it is the private goods that motivate individuals to join environmental groups. Based on his analysis of several groups, Mitchell concludes that individuals become members of such groups for fear that the costs of not joining are high. The primary cost of not joining is the continued existence of a bad environment bad in the future. Individuals fear polluted air and rivers, extinction of biological diversity, the potential of nuclear catastrophe and the like.

Very few studies, however, have been conducted to empirically test the various theories of group membership. The results of these studies are mixed. One study found that Olson's theory works for certain groups but does not work for others (Sabatier 1992). A survey done on the membership of the Sierra Club in the USA, on the other hand, seems to support Mitchell's theory. Milbrath's (1984) study concluded that perception of environmental threat and a desire to be out with nature with others with similar interests lead to membership. A study done on environmental groups in the United Kingdom found that the most important motivation for membership is "to register support for the group's aims" while "to get special benefits and privileges" was ranked second (Lowe and Goyder 1983).

METHOD

Selection of the NGO

The Malaysian Nature Society was selected for the study for several reasons. First, the group is one of the oldest environmental NGOs in the country and is well known for its diverse programmes and activities on environmental awareness and conservation. Second, besides being one of the oldest, it has been reported to be the biggest environmental group in the country. The group has more than 5000 members.

The Malaysian Nature Society is dedicated to the promotion of nature appreciation, conservation and protection of Malaysia's natural heritage, focusing on biological diversity and sustainable development. Established in 1940 by a small group of keen naturalists, MNS is the oldest scientific and non-governmental organization in the country (Saleh 2002).

The philosophy of the MNS is to get Malaysians and other residents involved in, exposed to and informed about nature and healthy outdoor pursuits through various activities. These activities include field trips, field courses, outdoor experiences, education programmes, exhibitions, talks, lectures, seminars and symposiums.

The society hopes to instill appreciation and care for Malaysia's splendid natural heritage, promote a sustainable management and conservation of nature and natural resources for future generations. MNS encourages the public to be members and also tries to create a clean image as an NGO that works closely with the government.

From a humble beginning, the society has bloomed into a mature organization. It has now been active in scientific research and one of its major achievements was organizing a scientific expedition to the Endau-Rompin Forest Reserve from 1986 to 1989. This expedition led to many new and exciting scientific discoveries and at the same time created awareness on the importance of conserving these areas. A similar expedition was organized to Belum Forest Reserve in Perak in 1998-1999. The Society is directly involved in the management of Kuala Selangor Nature Park and is responsible for the establishment of MNS-Boh Field Studies Centre in Pahang (Saleh 2002). In recognition of its various achievements, MNS was presented the Global 500 award for its contribution towards the protection of the environment.

The MNS offers its members a number of benefits and privileges including free copies of the Society's publications, namely, the *Malayan Nature Journal* and the *Malayan Naturalist*, discounted prices on T-shirts, cassettes of birds and animal calls, regular newsletters from the local branch containing activities and programmes, the use of a library maintained at the head office, and the retrieval of information from the society's data base maintained at the head office.

Trends in Membership of the MNS

Table 1 shows the trends in the size of membership of the MNS for the 1991-1999 period.

Looking at the table, one can see that the size of membership of the biggest environmental group in Malaysia is still very small when one considers the total population of the country

TABLE 1
Membership of the MNS, 1991-1999

Year	Size of Membership
1991	2527
1992	3186
1993	3221
1994	2363
1995	5500
1996	4500
1997	4179
1998	4054
1999	4016

Source: Registrar of Societies (2001)

which is more than 20 million people. Membership of the MNS represents less than 0.25% of the total population of the country. The table also shows that membership fluctuated in the first half of the 1990's, peaked in 1995, and then went down, though quite stable, in the second half of the period.

Data Collection and Analysis

The list of current membership of the MNS was not made available to the researcher at the time of data collection. Therefore, it was not possible to select a specific group of respondents for the study. However, through several survey techniques, responses from a total of 100 respondents were solicited at the end of the survey period.

A survey questionnaire was prepared to gather socio-economic data of the respondents as well as their reasons for membership. The questionnaire was put online on the MNS web site for a period of one month in 2001. It was also distributed to members who attended the MNS Annual General Meeting in September 2001. These two strategies managed to gather responses from 100 members which represents only about two percent of total membership. Of the two strategies, the later gathered more responses.

The questionnaire reported by Lowe and Goyder (1983) was adopted for the purpose of determining the reasons why members join the MNS. Essentially, the question listed five reasons for membership and the respondents were asked to rank these reasons according to their importance. The five choices, more or less, present some the arguments made by the various theories on group membership. In other words, the ultimate aim of the question is to find out which

of the theories explains best why members of MNS join the society.

The five choices are as follows:

- i. to register support for the Society's aim
- ii. to get the special benefits and privileges of membership
- iii. to get actively involved in doing and organizing voluntary work
- iv. to seek social contact and companionship
- v. to further their own point of view and influence the direction of the Society

RESULTS AND DISCUSSIONS

Socio-economic Profile of Respondents

Some data on membership of the MNS are shown in Table 2 and Table 3.

Table 2 shows that membership of the Society comprises slightly more male than female while in terms of race, the Chinese make up the biggest proportion compared with other races with a ratio of nearly 2:1. The Malays only form about ten percent of the membership. Data in the table also show that the majority (almost 60%) of the membership come from the private sector.

Table 3 provides data and information on other aspects of membership of the Society. It can be seen that membership of the MNS comprises mainly individuals between 30 to 40 years old having Bachelors degree and earning between RM2000 to RM3000 per month. Having such a youthful membership, it is not surprising that the median length of membership is between one to five years.

Data and information obtained from the survey portray a picture that membership of the MNS comprises relatively young individuals mainly from one ethnic group who work in the private sector. Another attribute of membership (not shown in the table) is that about 55% are scientists and professionals.

This information taken together seems to suggest that membership of the MNS, and probably of other environmental groups, is quite different from the general population of the country, particularly in terms of race, age and employment. An obvious question to ask is "why does an environmental group attract members having such profiles?" Some answers to this question may be forthcoming when data on reasons for membership are presented.

Sources of Information About the Society

Before asking the question on the reasons for becoming members, the respondents were asked on the method of obtaining information on the MNS and its roles prior to joining the Society. Responses to this question would tell the management of the Society on the potential of the various sources as channels of information in the process of attracting membership. The responses to the question are shown in Table 3.

Data in the table show that word of mouth is an important means through which information about the Society is conveyed to potential members and help influence them to become members. More than 60% of the respondents indicated that they learnt about MNS through

TABLE 2
Distribution of respondents by age, race and employment sector (n=100)

Gender (%)		Race (%)				Employment* (%)	
Male	Female	Malays	Chinese	Indians	Others	Public	Private
58	42	10	65	17	8	37	59

* Four respondents did not respond

TABLE 3
Median values of members' characteristics (n = 100)

	Age (years)	Education	Monthly Income (RM)	Length of Membership (years)
Median	30 - 40	Bachelor Degree	2000 - 3000	1 - 5
% of Respondents	24	37	23	83

TABLE 4
Sources of information on MNS

Sources of information	Percent of Respondents
Through friends who are members	62
Briefing by the Society	16
Newspapers	11
MNS Brochures	9
Radio/Television	2
TOTAL	100

friends who are members of the Society. The Society's direct efforts to attract membership, mainly through briefing and brochures, only managed to influence about 25 percent of membership. The media, in particular radio and television, have not been important sources of information for potential members.

The above results suggest that membership of the Society could play an important role in attracting potential members. Consequently, the Society should formulate and implement strategies to harness the potential of its members as membership recruiting agents. Efforts should be made to regularly inform the members about the philosophy and objectives of the Society as well as its detail programmes and activities. In so doing, the members would be well informed about the Society and be in a better position to convince potential members to join the Society. The MNS could also run a "Member get Member" campaign and provide rewards to those who manage to recruit a large number of members.

The MNS may not have resorted to using the media to inform the public about the Society. Such being the case, it should be expected that

the media has not been an important source of information for the members.

Table 5 shows the ranking of the reasons given by the respondents to the question for joining the MNS. As can be seen, more than half of the respondents indicated that they became members because they wanted to help in the attainment of the goals of the Society. On the other hand, one in five respondents joined the Society because they liked to participate in voluntary work, presumably in the area of environmental protection and conservation. Of the remaining respondents, a slight majority chose to join because they wanted to enjoy the tangible benefits by becoming members mainly in the forms of free journals and magazines and discounted souvenir items.

The results presented in Table 5 lend support to certain theories on environmental group membership more than the others. Specifically, the results tend to give more support to the arguments made by Truman and Mitchell and less to those made by Olson. Truman argued that the formation of groups in any society is a natural process and the primary motivation of individuals to join these groups is shared or

TABLE 5
Reasons for joining the MNS (n=100)

Reasons	% of Respondents ranking reason as number one
To register support for the Society's aims	51
To get actively involved in doing and organizing voluntary work	21
To get special benefits and privileges of membership	8
To seek social contact and companionship	6
To further own point of view and to influence the direction of the Society	4
TOTAL	90*

* Ten respondents did not answer

common interest. It is common or shared interests that bound members of these groups together. Accordingly, the groups act as formal channels through which members express their opinions on issues related to the shared interest.

The study reveals that, for the majority of the respondents, it is shared or common interest that motivates them to become members. These respondents have indicated that they joined the MNS because they share and support the aims of the Society in protecting and preserving nature and the environment.

About one-fifth of the respondents indicated that they liked to participate in voluntary work on nature conservation and the MNS provides the avenue for them to get involved in this noble venture. Even though their participation is voluntary, these respondents did not expect any tangible benefits from such involvement. However, their participation must be driven by other motives. One of these motives should be to contribute to the conservation and preservation of nature and the environment, thereby helping to prevent environmental catastrophes from occurring. Such catastrophes or disasters would include species extinction, polluted rivers, polluted air, droughts, and so on. Such an argument on why individuals join environmental groups supports the theory of "apparent illogic of collective action" espoused by Mitchell (1970). The main argument underlying Mitchell's theory is that individuals fear the occurrence of environmental destruction and will expend their energy and time to prevent them from happening. Participation in the activities of environmental groups is one of the ways towards achieving that objective.

The findings lend little support to the theory of "the logic of collective action" which argues that individuals join environmental groups in order to gain economic benefits through membership (Olson 1971). Economic benefits are goods and services that only members would enjoy by being members. In the case of the MNS such benefits include free Society's publications, discounted t-shirts and other souvenir items. As revealed earlier, only eight percent of the respondents indicated that their motivation for joining the MNS is "to get special benefits and privileges of membership."

Further analysis reveals that those who ranked reason 1 as motivation for joining the MNS are quite different from the other members

of the group in terms of race ($p=0.002$), professional background ($p=0.000$), employment ($p=0.047$) and monthly income ($p=0.002$) but not in terms of gender, age and level of education.

CONCLUSION

This study focuses on membership of NGOs because members are an important resource to an environmental group. The success of the group's activities partly depends on its members for support, particularly for funds and labour. The bigger the size of membership, the greater will be the support, and hence, the strength of the group.

The study reveals that there can be many reasons which motivate individuals to join an environmental group and this means that the group, such as the MNS, needs to emphasise different reasons to appeal to different groups of potential members. In other words, the group needs to project itself differently to different groups of individuals. Depending on the individuals, the group could portray itself either as a savior of the environment, as a refuge for voluntary environmental activities, as a kind-hearted organization with lots of goodies and discounted items to pass around, or as the ONLY NGO with opportunities to socialize with like-minded environmental-caring individuals.

A rather disheartening conclusion that comes out of the study is that environmental NGOs are undersized. The Malaysian Nature Society is one of the oldest, if not the oldest, and the biggest of the environmental citizens NGOs in the country (Kenny Cheah 1999). Unfortunately, the size of membership of the biggest and the oldest environmental NGO in the country is relatively small compared with the total population of the country. Hence, it can safely be assumed that the combined membership of all environmental NGOs is still small. If membership of environmental NGOs is an indicator of environmental concerns among the citizens, then, the level of environmental concern is still quite low. Having said that, the battle for environmental safekeeping for the environmental NGOs is still far from being won. The NGOs need a lot of support from a bigger section of concerned citizens in their efforts to promote the conservation of the environment. The challenge ahead for the NGOs, like the MNS, is still very great.

The MNS may need to attract more members from the public sector, particularly those who have the capacity to influence decisions on environmental policies. This is especially true if the Society aspires to have a greater impact on public policy decision-making. Such members will provide the channel to access the centers of decision-making and this is an important political asset for the organization. In order to attract more members from the government sector, the Society may need to establish a strong rapport with government agencies through some smart partnership arrangements. This helps to build the image that the Society is "government friendly".

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Social and Cultural Influences in Reception of a Development-oriented Television Programme in a Multi-ethnic Society

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ABSTRAK

Kajian ini disusun untuk mentafsir bagaimana masyarakat berbilang kaum memberi kesan kepada rancangan televisyen yang berteraskan pembangunan. Dalam erti kata lain, ia berkisar kepada aktiviti masyarakat yang berlatarbelakangkan pelbagai kebudayaan sebagai penonton rancangan seumpamanya. Integrasi kaedah penyelidikan Sains Sosial dan Kemanusiaan membolehkan analisis perbandingan empirikal dijalankan dalam topik ini khasnya antara media dan perbincangan audien. Satu kajian awal telah dijalankan untuk mengenal pasti isu yang boleh digabungkan dalam struktur borang soal selidik dan kemudiannya dibincangkan dalam sesi bersama kumpulan sasaran. Kumpulan sasaran tersebut merupakan kaedah penyelidikan utama melalui data yang dikumpulkan daripada pelbagai kumpulan kajian yang dinilai secara perbandingan. Daripada dapatan tersebut, didapati bahawa setiap kumpulan etnik yang menonton program televisyen membuat pertimbangan kompleks yang dimanipulasi, justeru, menyebabkan penghasilan kepelbagaian maksud yang terhasil daripada kecenderungan peribadi. Kajian ini juga menyokong tafsiran bahawa kandungan program televisyen adalah bersifat sosial dan merewang. Faktor yang menjadi belunggu sosial seperti budaya, cara bekerja dan sikap serta taraf pendidikan didapati menyumbang kepada pembentukan sikap pentafsiran responden. Kecenderungan mereka dilihat apabila mereka mengaitkan kandungan media khusus memaksa mereka untuk mengambil posisi pentafsiran yang berbeza. Teori Parkin, *Meaning System* (1972) menolong untuk mengukur posisi pentafsiran ini dan dikenali sebagai *the dominant*, *the negotiation* dan *the oppositional*. Walaupun begitu, kajian ini mencadangkan satu kaedah lebih fleksibel dibina yang boleh menjelaskan kompleksiti dan kepelbagaian dalam pembinaan maksud media. Menariknya, kajian ini juga mengukur subjek pembangunan yang dianalisis daripada pandangan komunikasi dengan menggunakan model komunikasi yang signifikan. Secara khususnya, strategi pembangunan semasa Malaysia, dengan menyentuh cabaran Wawasan 2020, telah dianalisis melalui pemahaman responden dalam program televisyen yang terpilih. Responden mengambil kira tentang persepsi di mana penggubalan polisi adalah dikawal secara politik, justeru mengakibatkan kebimbangan di antara etnik yang berbeza dengan kadar dominan yang berbeza. Maksud diterbitkan yang berpunca daripada interaksi media dengan kandungan media tidak dibayangkan secara nyata pada tahap psikologi pengguna, tetapi selalunya ia juga mencapai pengaruh sosiologi. Kajian ini juga mencadangkan agar kajian seumpamanya dijalankan di penempatan pelbagai kaum di serata dunia.

ABSTRACT

This research sought to understand how a multi-ethnic society interprets a development-oriented television programme. In other words, it dwelt into the reception activities of the people from

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various cultural backgrounds as they watched such a programme. The integration of the Social Sciences method of inquiry and the Humanities enabled a comparative empirical analysis to be carried out on this topic specifically between the media and the audience discourses. A preliminary study was first conducted with a purpose of identifying issues that were to be incorporated into the structured questionnaire which were later used in the focus group sessions. The focus group was the main method of inquiry through which data were collected from various study groups and comparatively assessed. From the findings we found that different ethnic groups made sense of the television programme in a complex and manipulated way, thus, resulting in the production of various meanings that reflect their personal invested interests. The study also supported that interpretations of television programme content were social and discursive. The socially bounded factors of the respondents such as their cultures, working style and attitude and educational level were found to have contributed to the shaping of the respective decoding behaviours. Their predispositions came into play as they relate to the particular media contents forcing them to take different decoding positions. The Parkin's Theory of Meaning Systems (1972) help to measure these decoding positions and described them as the *dominant*, the *negotiation* and the *oppositional*. However, this study suggested that a more flexi measure if developed could account for complexity and multi-variability in meaning making of media messages. Interestingly, this study also indicated that the subject of development could also be analyzed from the communication viewpoint using the significant communication models. In particular, the present Malaysian development strategies, with special reference to the challenges of Vision 2020, were analyzed through the interpretation of the respondents on the selected television programme. The respondents were very concerned about the perception that the development policies were politically-bound, thus causing certain level of anxiety among the different ethnic groups with different dominant level. Meanings produced as a result of interactions with media contents are not conceived merely at the psychological level of the users but often reaching the realm of the sociological influences too. The study suggested that a similar research be conducted in other multi-ethnic societies in other parts of the world.

INTRODUCTION

Reception is the central activity and trust of this research. Reception of development-oriented media contents by the society, however, has a significant role in determining the general health of this country in its effort to gain stability, growth and unity among the different ethnic groups that make up its society. The use of complementarity and non-complementarity of codes in the interpretation of such media contents, and in this case, the development-oriented television programme, had brought some significance to this study.

Audience members acquire different experiences in life, and this decides the members' different social discourses. Reception studies tradition assumes that meanings do vary and these variations are caused predominantly by the audiences' own personal discourses. Although variations in meaning are inevitable in decoding of media contents, in cases where the texts are purposely loaded with some political ideologies that support the national hegemony, meanings that vary from the conventional rules may render special attention. This implies that the audience members have selected the non-complementarity

of codes in their interpretation work. Meanings resulted from a non-complementarity of code are regarded as resistant or oppositional to the dominant ideology.

This study was dominantly to find out what kind of decoding pattern exists among the different ethnic groups in this country and what influenced it. What effects did the decoding pattern bring to the society at large socially, economically and politically? Specifically, how would the television relate to the demand of the people towards the meaning of development in this country where the development strategies are predominantly determined by racial hegemony? What would seemingly be the rightful role of television in its attempt to position itself in a country of multi-ethnic societies like Malaysia? In short, could media power in the professional sense be free from hegemonic ideologies?

Why Malaysia? It is non-other than its multi-ethnic nature of its society. Beyond the ethnic segmentation the society is also characterized by the dichotomous 'dominant-subordinate' relationship which breeds a form of power struggle, each grasping for an identity socially, economically and politically. A genuine inter-

ethnic unity was hard to come by. The seemingly inter-ethnic relationship was built on a political census over a conference table for the sake of getting independence from the colonial power, the British.

Today, after about 47 years of independence, unity is still hardly called the product of acculturation because time and again the country had been tested and challenged. Learning from hindsight, affective national policies have been introduced to enable acculturation starts from primary schools. The country is now in the process of social re-engineering of schools to avoid further pseudo unity affecting future society.

With that as a background, the main objective was to analyse the reception or decoding of the different ethnic groups, namely the Malays, the Chinese, the Indians and the Sarawak indigenous people (to represent the Bumiputra population from East Malaysia) towards a particular development-oriented television programme.

The specific objectives of this study, however, are as follows:

1. To examine the range of meanings made by respondents (the different ethnic groups) and what causes them to vary,
2. To construct a decoding pattern from the various groups of meaning above,
3. To find out what is the nature or description of 'fit' between the income level based code and the ethnic based code in the production of meaning',
4. To identify the 'point of contact' between the respondents and the television programme text, in terms of the most common and salient issue that might have emerged from the viewing,
5. To find out what attitude(s) the respondents have towards the issue and to plot a pattern of their responses,
6. To identify the decoding strategies or interpretative codes used by the groups that produce anti-dominant meanings'
7. To examine the relationships between the pro and anti-dominant decoding and the relevant challenge of the 'Vision 2020'.

REVIEW OF THE LITERATURE

Reception Analysis is an emergence of a new type of audience studies, first led by Morley's work on the 'Nationwide Audience' (1980). Since then, much of the writings on this have focused

on the new tradition in understanding of how audiences 'read' media contents. Following his path, several studies have been carried out in the last decade implying that reception is social and discursive. The main approach used was through a convergence of text-oriented semiotics and audience-oriented cultural studies. The literature mentioned, Ang (1989); Becker (1984); Evan (1990); Jensen (1987, 1990a, 1990b); Jensen and Rosengren (1990); Lewis (1985, 1992); Lindlof (1988); Lull (1980); Morley (1983, 1993); Radway (1988); Schroder (1994); and Wren-Lewis (1983). The most significant studies were covered either in the factual or news area, the entertainment area, or ethnic, sub-ethnic and sub-cultural area.

The Factual or News Area

In the news-type area, the works of Morley (1980), Lewis (1985), and Jensen (1990a) are worth noting because they represent quality and strength in the qualitative audience studies tradition. Morley (1980) found out that culture determined the respondents' non-completeness decoding more than their class position in which his respondents were a part of. The cultural domination or resistance manifested in the respondents' discourse was a powerful determinant in explaining meanings made from media contents.

Lewis (1985), on the other hand, found that decoding of news materials was quite different compared to non-news materials. It involves encoding and decoding process of texts. Viewers of news programmes usually have only a limited range of appropriate meaning systems (narrative contexts) to draw upon. Through what is called 'lexias' (units of meaning as constructed by viewers) the viewers will have only a specific form of access. Therefore, if the narrative contexts of the news items are well constructed, the interpretative meanings will be more dominant or match the preferred meanings of the texts. Lewis' study of 'News at Ten' (1985) found that it failed to get its message across to a majority of its decoders because the narrative contexts were poor, thus affecting the lexias that was produced.

While Lewis worked on the narrative context of the text as a determinant in reception, Jensen (1990a) on the other hand, found that the themes in the news did facilitate participation by the public in political processes. Factual programme contents such as news are usually ideological and

thus, carry ideological implications to the viewers. Jensen saw the respondents' evaluation of 'Danish Television News' as a cultural forum. The national and international political issues and events that served as themes became the determinants in explaining political participation from the public.

Reception of news or factual genre was carried out in many different modes. However, the new audience studies tradition through its empirical qualitative approach has seen that reception could also be explained by the recipients' cultural backgrounds, the narrative contexts of the texts as well as the themes of the media contents.

The Entertainment Area

In this area, great interests have been placed in analyzing the relationship between the soap opera genre and gendered recipients, especially women. Researchers like Ang (1985), Hobson (1982), Radway (1994) and Seiter *et al.* (1989) were interested in knowing 'what' in the 'feminine' genre actually appeals to women who were described as the most common viewers. Ang (1985) described the new tradition as a form of Cultural Studies because it has developed a theoretical assumption that people create their own meanings rather than absorbed pre-given meanings imposed upon them. The success of 'Dallas' against the European public policy by Ang, the work of Hobson on 'Crossroad' (a soap on Independent Television (ITV) channel), and Radway's work on reading of romances, all showed that decoding experiences were related to the broader context of the social system.

The Ethnic, Culture and Sub-cultural Contexts

Katz and Liebes (1984) and Lull (1980, 1988a) concluded that mass communication could be an important resource within other cultural practices. Katz and Liebes (1984) did a study on the reception of 'Dallas' by multi-ethnic and cultural people of Israel. They found that television viewing was social and culturally determined of the meanings they made. Both the culture of the viewers and the producer are manifested through the programme. Methodologically, the focus group method was found to be the most natural way of looking at reception because the discussions acted as a forum for discussing social issues and themes. However, the 'critical distance' of the participating groups contributed further to the different decoding. As such, decoding was

categorized at three different levels; as Israelites, as sub-cultures, and as wife and mother.

Lull also stressed that the social use of television depends much on how television influences and how the users interpret and use television within their contexts. He also supported the qualitative nature of looking at television viewing such as, in families because the detailed events the viewers create in order to make meaning will all be considered.

The claim in the new audience studies that reception is a social phenomenon and culturally determined was well proven by the above researchers. Focus group method was most adequate in capturing the fundamental aspects of human interactions, the core of reception activities.

THEORETICAL PERSPECTIVES

The main theory used in this study is Reception Theory as opposed to other audience theories such as Effects Theories and Uses and Gratifications. It is a step closer to a better approach in understanding audience reception because it is not merely looking at what media do to people and what people do with the media consecutively; rather, it is understood in relation to the existing socio-cultural system.

This study also touched on the issue of 'preferred reading' that is central to the process of reception. Thus, addresses on reception and preferred reading were also made in contexts of Hall's Theory of Encoding and Decoding (1973) especially concerned with whether it is the property of the text or is it something that is generated by the audience. Nevertheless, according to Morley (1989) this theory does support the fact that audiences do engage in productive work. The other important theory that helped the understanding of reception is the Theory of Meaning Systems by Parkin (1972). It provides the 'potentials' in decoding the structure the various types of meaning audiences make from media contents.

The communications analyzed in this study were made in the context of the Malaysian development policy known as the Vision 2020. Through the viewing of a development-oriented television programme, the respondents made their perception of what development meant to them especially when related to the specific challenges. This shows that development need not necessarily be measured by development

theories and economic indexes only but communications too.

For the study, a research framework indicating the important variables derived from the above theories was developed as illustrated in Fig. 1. In reception, the central issue reckoned was 'meanings', the outcome of the respondents' interaction with the television programme content, of "Miskin", meaning, poverty. The source of its production was the government, since poverty is a topic of state and national interest. The government is the state authority in the eradication of poverty programmes as well as in the construction of the national development policy. The television was a tool for reproduction of national ideologies despite its private status in ownership. The communities of meanings characterized by the respondents' socio-cultural qualities of discourse or their world of experience belonged to the various ethnic groups that made up the interpretive communities of this study. Those meanings were regarded only as empirically worthy as the analysis of the

programme text was comparatively analyzed against the analysis of respondents' decoding of that text. The meanings that resulted were socially valued as they were interpreted in the context of the social system in which the group lived.

The pattern of meanings resulting from the mapping out of sample groups' responses thus indicated to us the different types of effects that the programme had offered to this study. Therefore, a dominant decoding position was read as the society being receptive of the state hegemony and the reverse was also true. Effectiveness of the media in reception is viewed both from the functional point of view as well as from the support it gives to the present hegemony.

The above model shows that a reception of a development-oriented television programme takes place in a multi-ethnic society. Applying it to the study, the government acts as the source of the messages that influence the television in its production of development-oriented programmes. The messages are loaded with

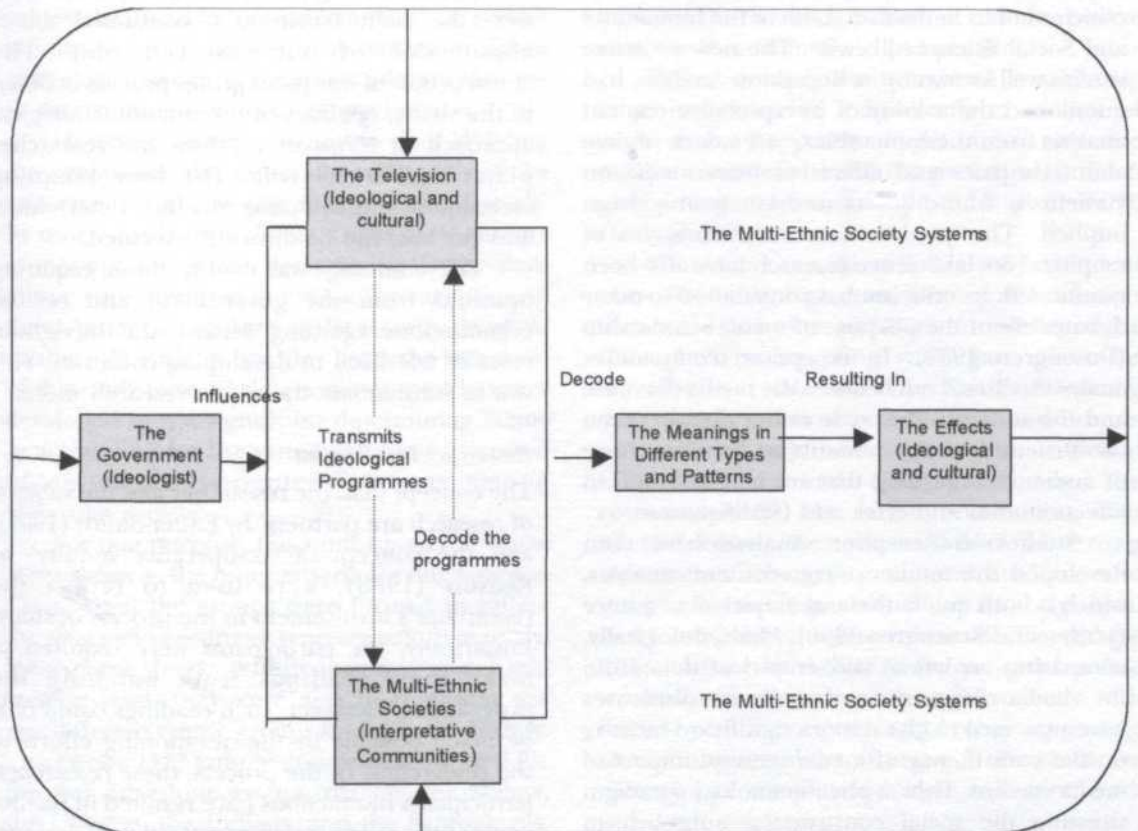


Fig. 1: A research framework model for reception analysis of a development-oriented television programme in a multi-ethnic society

ideologies and cultural elements that aimed to inform, influence and persuade the multi-ethnic audiences (interpretive communities) to believe in the policies and programmes planned by the government in its nation-building activities. As they decode the messages, they make meanings in many ways and patterns resulting in the production of effects, which are ideological and cultural too. This signifies the theory that television serves as an ideological reproduction apparatus of the government in developing countries. The elements contained in the framework interact with each other within the social-cultural system where reception takes place. Thus, media reception in one place produces meanings that signify the behaviors and attitudes of the users at that particular place.

METHODOLOGY

A significant difference between the old audience research tradition and the new is in the mode of enquiry. The old research tradition, which was commonly carried out in effect studies and later improved to Uses and Gratifications, was criticized of its limitations, both in the humanities and Social Sciences likewise. The new audience studies well known by its Reception Analysis, had questioned the validity of interpretative content analysis from the humanities, as a source of data about the uses and effects of mass media on audiences, whose positions have mainly been implied. The predominant methodologies of empirical Social Science research have also been questioned. Its criticism has contributed to many debates about the purpose of media scholarship (Rosengren 1989). In reception, comparative analysis is carried out between the media discourse and the audience discourse rather than between the structure of the contents and the structure of audience regarding that content as found in effects studies and Uses and Gratifications.

Studies in Reception Analysis have then developed the 'audience-cum-content' analysis, which is both qualitative and empirical in nature (Jensen and Rosengren 1990). Methodologically, comparing analytical and empirical data from the media discourses and audience discourses have managed to give a more significant bearing on the realistic way of media use and impact of media content. Thus, a phenomenology paradigm stressing the social construction approach in gathering data was more appropriate to describe the social process of reception that lays centrally

in attitudes and values of the decoder. A qualitative research design via the process of in-depth interview was carried out in this study since it could effectively show how the different ethnic groups make meaning out of the television programme content, "Miskin" (A magazine television programme from TV3 known as *Majalah Tiga*).

The Research Design

We conducted the study in *three stages*. The *first stage* was an exploratory study whereby our main aim was to get as much information as possible about the television programme being examined. Such an input about the programme "Miskin" was crucial to the study because it helped in the structure of the focus group questionnaire. We consequently interviewed those TV3 professionals involved in the production of "Miskin". At the same time, RTM television professionals involved with the production of same programme genre were also called to inform us on the rationale used in producing such programmes.

The *second stage*, the focus group interviews, were the main activity as it consumed almost about 85% of our research time. The construction of our focus group process believed in the strong qualities of the phenomenological approach in terms of (a) how the researcher plays his/her role, (b) how sampling techniques and sampling size are determined, and (c) how the fieldwork is executed.

The *third stage* was mainly about acquiring opinions from the government and related organizations regarding "Miskin" and the rightful roles of television in developing countries. This was to substantiate the whole research more.

Researcher Involvement

The concept that 'the researcher and the subjects of research are partners' by Easter-Smith (1991), and the concept of 'co-operative inquiry' by Reason (1988), were used to reflect the researcher's involvement in the process of study. Empirically, the participants were required to make their readings from watching the programme. However, such readings could only be made possible by the questioning efforts of the researcher. In the process, these researcher-participants interactions have resulted in further generation of ideas that was worth researching. The involvement of the researcher indeed helped to enrich the whole quality and quantity of the

meanings developed in this study. The partnership was indeed an important component of the empirical work.

Sampling and Sampling Size

It is important to note that this study aimed at observing the processes of the different ethnic groups in this country, rather than how the general Malaysians, 'read' a development-oriented television programme. In other words, the study was more interested in finding out how the Malays, the Chinese, the Indians (to name some of the ethnic groups) make meanings when they watch such a programme. The people are better known or characterized as multi-ethnic and multi-cultural rather than as homogeneous Malaysians (S. Husin Ali 1984). Ethnic distinctions were so obvious and not only marked by their physical traits but cultural norms and religious beliefs. Inter-ethnic relations if they exist, are more of 'plural society-oriented'. It is for these reasons that we did not select the typical demographic factors, like age, gender, education, etc., to represent our interpretive communities. We believe that these factors would not add far greater validity to any conclusions of our study. *Ethnic segmentation*, hence, became our prime technique in determining our focus group samples.

However, being a country that is being dominated socially, culturally and politically by one race, could this objectivity be raised at all? In other words, can class-consciousness emerge as a more important determining factor than ethnic consciousness in explaining reception of developmental messages as the country develops further? As such, it has also been the intention of this study to see if class consciousness has now developed into a significant determining factor in accounting for the varied nature of reception of development-oriented contents among Malaysian society.

For that purpose, this study opted for *income segmentation* as the other criteria for our samples. Thus, when the groups were formed to reflect the *three* socio-economic representations, namely, low-income level, middle-income, and high-income level, they were also to represent the *four* different ethnic groups found in the society.

Twelve (12) sample groups were formed for the *four* sub-ethnic groups, namely, the Malays, the Chinese, the Indians, and the Sarawakians. However, the Malays and the Sarawak Indigenous

had an extra group each, which made up fourteen (14) groups. The affiliation of the Malays in UMNO and PAS was seen as a factor to account for the different ways the politically-divided Malays in interpreting development-oriented contents. Thus, we formed one group from those supporting UMNO and one other that support PAS. Incidentally, the PAS group also represented the rural character of the Malay population in this country.

Sarawak indigenous society or the Sarawak Bumiputra, is made up of many different sub-groups. Thus, conveniently we drew a line dividing the Sarawak Malay and non-Sarawak Malay, the two main political-bias indigenous groups. Both groups then formed a group each. Psycho-culturally, these two groups were different and hence, we believed that they could supply varied opinions about development. Please refer to Table 1 below for a summary of the sample groups (interpretive communities) of this study.

The table shows a matrix of Ethnic-Income relationship of our interpretive communities. Directly, it was the purpose of this study to examine the decoding pattern of our interpretive communities from these perspectives.

Since our study was not aimed at achieving a generalization or validity effects as that of research in the positive type, our sample size may be considered small (85 participants). Each group ranged from, as little as, 5 (five) to 10 (ten) persons.

We made a careful study in our recruitment exercises, taking high consideration of the factors that could reduce credibility and validity of the research. The sampling work gave particular attention to certain issues like 'familiarity among the participants within a group' and 'representation of population to achieve sufficient variability.' We took efforts to remove the common pitfalls, like, lacking moderating skills of the researcher, domination of strong characters in the group, cultural hindrances of the participants especially those from the rural and some political interventions. We faced these limitations or hardships in the process because we dealt with the open society. Fortunately, with the co-operation of people and other supporting community members at research locations, we managed to complete our data collection work with high satisfaction.

TABLE 1
The sample groups (interpretive communities) of this study

Income / ethnic	Malays	Chinese	Indians	S'kians	Total
High-Income					
• Professionals	1	1	-	1	3
Middle-Income					
• Clerical/Technical	-	1	1	-	2
• Teachers	-	-	-	2	2
• University students	1	1	1	-	3
Low-Income					
• Farmers	2	-	-	1	3
• General laborers	-	-	1	-	1
Total	4	3	3	4	14

Profiles of the focus groups were:

- Group 1 : Professionals, Shah Alam, Selangor.
- Group 2 : Universiti Putra Malaysia students, Serdang, Selangor.
- Group 3 : Small-scale farmers, Kuala Rengas, Perak.
- Group 4 : Small-scale farmers, Kota Bahru, Kelantan.
- Group 5 : Executives, Malaysian Airlines, Kuala Lumpur.
- Group 6 : Universiti Putra Malaysia students Serdang.
- Group 7 : Universiti Sains Malaysia clerks, Penang.
- Group 8 : Universiti Sains Malaysia technical staff, Penang.
- Group 9 : Universiti Putra Malaysia students Serdang.
- Group 10 : Manual workers, Kelab Golf Perkhidmatan Awam.
- Group 11 : Professionals, Kuching.
- Group 12 : Student teachers, Kuching.
- Group 13 : Student teachers, Kuching.
- Group 14 : Small-scale farmers of the Senyawan long house, Saratok, Sarawak.

The researcher conducted the focus group interviews, running from several sub-regions in the Malay Peninsula to Sarawak in Borneo, from July 10 to September 25, 1994. The researcher moderated most of the sessions except two, due to some language problems. To overcome these, the study was assisted by a trained facilitator who mainly helped in translating some of the terms that gave problems in understanding.

The Fieldwork and the Empirical Data

The study opted for in-depth focus group interviews as advocated and adopted by Morley (1980). Although this methodology is not a typical ethnographic inquiry, the data (qualitative) were sufficient to meet the objectives of this study. More importantly, the comparative analysis procedure carried out between the examination of the programme text and the analytical response of the participants towards that text made our research inquiry a scientific and empirical one. As a result, a certain amount of 'closure' resulting from the work of textual or genre conventions contained in the structure of the text (Hall 1973), guided their decoding. The participants did not decode on their own free judgment. This was indeed the essence of the 'preferred reading' theory claimed by Hall (1973).

The proponents of critical research traditions argued that qualitative data from media-audience encounters are empirical and ethnographical because the sources of data are from in-depth, open-ended interviews instead of the 'self-reporting' of the questionnaire-type. Morley (1980, 1992), Ang (1985, 1990), Jensen (1990a), to name a few, advocated the importance of qualitative data in examining reception of media consumers.

Conducting the Focus Group Interviews

The focus group sessions were conducted immediately after the participants had viewed the recorded programme. The intention was to exploit the participants' fresh memory to the maximum. Although studies in television viewing

had called for the activity to be done naturally in the viewing environment or viewing during the actual transmission time, the choice is still dependent on the overall objective of the study. 'Naturality' was not the main aim of the study but the act of decoding of the participants was. The latter took into account both the ideological determination and significance of the text as well as the competence of the participants in decoding the content.

Hence, the fear that the 'pseudo social setting' would reduce the effects of physical and interpersonal conditions in shaping viewers' interpretation would be less of our concern.

Above all else, we were interested to find how codes rather than those factors like physical or interpersonal setting shape their meaning positions to be either dominant, negotiation or oppositional to the present hegemony. The concept of interpretive communities itself stressed on the importance of codes and its sources rather than the environment where the reception took place. 'Naturality' and 'informal environment' were soon achieved as discussions heightened. A high consideration was given to the use of space to remove physical or psychological blockages but motivate effective communication during the interviews. By the way, sessions were mainly conducted in offices, classrooms and houses.

In every session, after viewing the programme, a brief discussion was held to introduce some fundamental issues meant to spark off the thinking process. Common questions like, 'Who is responsible for the eradication of poverty in this country?', 'Can this country be free of it by the year 2020?', 'Can you help?', and 'Do you want development?' After the 'ice breaking' session, the participants were slowly brought to the film again and the first question from the prepared topical guide was given to the participants to start the discussions.

The range of topics attempted to extract both the explicit and the implicit meanings of the content. Since development messages are ideologically symbolic, we certainly needed careful analyzing skills and strategies to understand why such meanings were made. For that purpose, we mapped their reasons within the participants' discourses and experiences.

The topical guide prepared for this study merely contains listed questions relating to the research problems and objectives. It was useful

in keeping our time effectively and at the same time helping the moderator to carry out his job consistently across all groups. The major topic touched includes the following:

1. What explicit meaning they make from the visuals or programme content.
2. What implicit meaning they create from interpreting the 'ideologies' transmitted through the programme messages.
3. What 'development ideologies' could the study identify from the programme content.
4. What roles and status our television plays in our society.
5. What presentation styles the programme uses.

Although the order of topics was predetermined, the actual usage was flexible as the needs arise. However, handling shifts was done with much care, as it is known to be one of the fallacies in moderating work.

All along, a video camera was used to record our activities and more importantly to assist in the analysis. Every movement and sound was recorded and the nonverbal interpreted. Although videotaping caused anxiety we exploited it to produce a more dynamic result.

The Choice of Television Programme "Miskin"

One of the requirements of this research was to select an appropriate development-oriented television programme, informative and 'light' enough for any ordinary nonprofessional to understand when viewing it but 'heavy' enough to contain important issues pertaining to development. On deciding which programme to choose, we took note of the concept of 'programme-type preference' from Morley's work (1981) on the issue of taste and preference of the audiences. This is an attempt to avoid mismatching of interest between the programme and the decoders. However, *Majalah 3* managed to solve this question because it came up to be one of the most highly watched television programmes at that time. The high rating it received as shown in the Survey Research Malaysia Report supported this.

Like other television stations in the country, TV3, though private, is a well-regulated broadcast station. It is equally responsible in helping the country meet its goal in nation building. Every socially constructed programme produced expects to operate within the guidelines of Rukun Negara. Loyalty to the ruling government, which is UMNO-based, is thus, an undeniable fact.

Analyzing the Programme "Miskin"

The study did an analysis on the programme before conducting the focus group study. The purpose was to develop a set of empirical data about the programme, which is to be matched later against the empirical data developed from the groups' decoding of the same programme. This process also enables us to identify or predict on the 'preferred reading' built within the messages. We did this with the producer who was responsible in making the intention became a reality. The next step was to seek the following information on:

1. how the topic was first articulated, in particular in terms of how the first idea was generated and by whom.
2. how the development ideology within the message was constructed, in particular in terms of TV3's attitude towards the Vision 2020 or the government's attitude towards eradication of poverty project among the ethnic groups.
3. how the content was structured (how background and explanatory frameworks were mobilized, visually and verbally; how guests were recruited and comments integrated; how discussions were monitored; and how ideologies were stated, openly or covertly).

This content analysis was crucial in mass communication research because it informed us how symbolic the programme messages were. This was particularly true especially when television in developing countries is commonly perceived as the ideological reproduction apparatus for the government. The affirmative economic and development plans in Malaysia had made researchers more eager to conclude that "Miskin" contained the politically constrained preferred reading built in the programme messages.

Analyzing the Focus Group Interview Data

The objectives of the study were determined through two-level analysis: the participants-content level (micro) and the interactions between the meanings developed from the first level analysis and the selected issue or challenge in the Vision 2020 (macro). As Ang (1990) has suggested, media reception should not stop at the media-audience encounter but should also address the differentiated meaning (if any) and significance

of specific reception patterns against articulating social relations of power. Understanding of media reception certainly requires equal attention to the structural and historical aspects of the society social system where the media are a part. Poverty in Malaysia was thus interpreted as a socio-cultural and political phenomenon, and any forms of contradictory meaning (if any) were 'read' as constraints to the existing hegemony.

As mentioned earlier, analyses were done microscopically and macroscopically. Several comparative group analyses were carried at *four levels* in a hierarchical manner. This means that we approached the most basic level before the next higher level is processed. The first three levels which refer to microscopic level aimed at analyzing the different ethnic groups' decoding on the programme, "Miskin". The last and highest level referred to as the macroscopic level was to match the results of the groups' reception against the eighth challenge of the Vision 2020. Fig. 2 shows the hierarchy of the decoding analysis of a development-oriented television programme in the multi-ethnic Malaysian society.

The above figure shows that the qualitative data obtained from the study went through four layers of analysis. At the *first* level, each individual group responses on viewing "Miskin" was recorded and analyzed. As a result, this process managed to generate fourteen (14) groups of data.

Comparative studies among the groups' responses within a particular ethnic were then carried out. This brought us into the *second* level of analysis. In particular, responses from Group 1 to Group 4, which refer to the Malay grouping, were analytically compared, and so were the responses from Group 5 to Group 7 (Chinese), Group 8 to Group 10 (Indian), Group 11 to Group 14 (Sarawakian). As a result, we were able to generate Malay decoding, Chinese decoding, Indian's and Sarawakian's decoding of "Miskin".

Consequently, these four ethnic groups' decoding data were then crossly examined. The purpose of this *third* or higher level analysis was basically to see how the Malays, for an example, look at development messages compared to the Chinese. What were found to be common among them and what were different? When the meanings differ why were they so? What factors contributed to the different meaning positions (dominant, negotiated and oppositional) as proposed by Parkin (1972)? The multi-ethnic

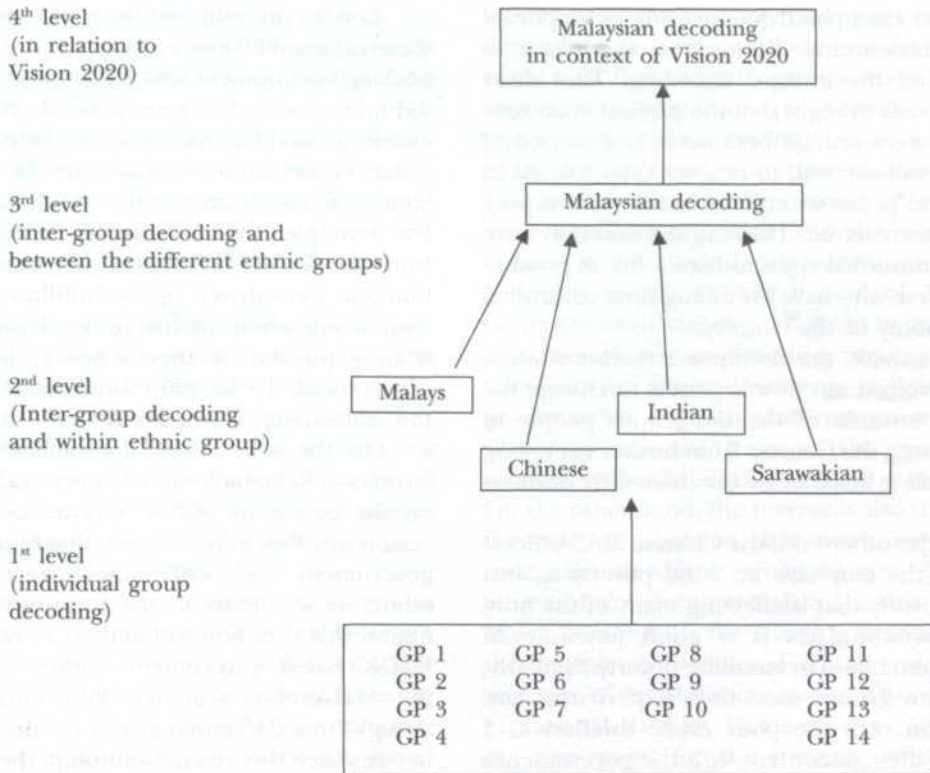


Fig. 2: The hierarchy of decoding analysis of development-oriented television programme in the multi-Malaysian society

decoding that resulted at this level indeed reflect an array of the 'Malaysian feeling and attitude' on development in this country.

As mentioned earlier, mass communication functions in the societal system where it is a part. As such, interpretation of mass media messages has to be made in the context of the social, cultural and political environment of the consumers if it is to be meaningful. In this study, the *fourth* level of the analysis took this role, which was to find out how the Malaysians feel about development in context of the Vision 2020, the big blue print for the multi-ethnic Malaysia to be a fully developed country by the year 2020. The hierarchical analyses that worked on the data obtained from the focus groups-media encounters thus have produced an output that revealed the many ways the multi-ethnic Malaysians perceive development in the context of the Vision 2020.

RESULTS AND DISCUSSIONS

The study brought up three main discourses that have generally influenced the Malaysian decoding on the programme "Miskin": the ethnic-

cultural, the socio-economic, and the social-oriented factors. The ethnic-cultural discourse was found to be the dominant 'fitter' in determining the decoding positions proposed by Parkin (1972) compared to economic and social factors. Socio-economic and other social factors had little or no relationship in determining their decoding behaviours. This means each individual ethnic group interpreted poverty or development mainly from the context of the group's own existence (history-politically and socio-economically) as a sub-ethnic group in a bigger Malaysian society. Relationships between the Malays and Chinese or the Indians and the Chinese acted as important determinants in interpreting development messages. In fact, the economic achievements of the Chinese were regarded as the 'yardstick' to the Malay support of the present corrective economic policy. At the same time, the participation of the Bumiputra groups in the Non-Bumiputra economic monopoly, was a source of Non-Bumiputra discontent. Each ethnic group indeed has its own dilemma and this is affecting the inter-ethnic relationship.

Other examples from the findings supported that ethnic-cultural discourse is significant in influencing the groups' decoding. The Malay professionals thought that the present economic policy is very crucial because it is a source of their overall survival, to recover their lost racial pride, and prove wrong the unfair stereotyping the Malays received. They argued that they have the constitutional right to lead a life as good as the Chinese who have for a long time controlled the economy of the country.

In Sarawak, the Bumiputra teacher-student trainees voiced out how urgent is to change the negative attitude of the indigenous people in order to stop the Chinese from further exploiting the people's weaknesses for their own business ends.

On the other end, the Chinese MAS officers felt that the emphasis on rural poverty against urban poverty that is affecting many of the non-Malay communities is a good example of government biases in handling poverty. Similarly, the Indian groups used their experiences and association with the poor estate dwellers as a basis for their discontent with the government's affirmative economic policies, such as, the New Economic Policy and later revised and changed to the New Development Policy.

In particular, the fear of the Bumiputra groups of the high-rise economic performance of the Chinese and the biases of the government's corrective development policies were the two main sources of the opposite codes used by the Non-Malay or Non-bumiputra groups in interpreting the programme contents. This shows that there was a lack of a unifying factor that might help the different ethnic groups agree of what should be a good development plan for the multi-ethnic Malaysians at the moment. That unifying factor, which is hard to come by, is 'racial unity', which is merely happening (if ever there is) at a superficial level.

In addition, the political consensus obtained from the different racial groups at the time of independence in 1957, left some legacies that contributed to the differences in treatment of some groups receive especially between the Bumiputra and the Non-Bumiputra. In the Constitution, the special rights of the Malays and the Malays as the 'masters' of state land, always run fresh in the blood system of the Malaysian. On these issues, sparks are easily turned on to start a racial conflict.

Besides the ethnic-cultural discourse, other social-oriented factors, such as political affiliation, working environment and organizational culture, did influence certain groups beside the existing ethnic-cultural factors. Some may be regarded as isolated cases but some others may be significant enough to create an alarm on national security. For example, the low-income Indian workers from the Kelab Golf Pentadbiran Awam, Kuala Lumpur, were driven by the fulfillment of their basic needs when discussing development. This is only possible if they support the present government. To be too ethnocentric and fight the mainstream is just too abstract for them.

On the other side, the small-scale Malay farmers in Kelantan pointed at political affiliation on the course of Islamic survival as the main reason why they were in opposition to the present government. The PAS sympathizers regarded ethnic as secondary to the creation of Islamic nation that they bow to build. They rejected the UMNO-based government's effort to develop the Malays but accepted PAS because they thought that PAS could guarantee their spiritual needs, which they manifest through their political activities. This is a case of high level abstract in setting up a discourse.

Understanding reception of development messages in Malaysia does require us to understand first the history and ethnic-cultural perspectives of the interpretive communities. They are the main sources of their decoding codes in interpreting development-oriented programme contents.

The first level of analysis examined how this ethnic-cultural discourse plays its role in helping the different groups decode or make meaning out of "Miskin". This analysis aimed to answer the first objective of this study, which is to find the range of meanings, and what causes them to vary as the groups responded to the text. A summary of the findings are as the following:

1. That development is ethnic-oriented: the challenge is to ensure the state experiences an economically-just society.
2. That 'communalism' (Malay-biased) occurs in television: the challenge of establishing a united Malaysia
3. That government and its policy function as a source of strength and weaknesses: the challenge of establishing a prosperous society.
4. That the poor has a poor attitude: the challenge of creating a psychological liberated society.

5. Religion versus development among the Malays: the challenge of establishing a fully developed and moral society with strong religious values.
6. That education is politicized: the challenge of establishing a progressive society.
7. That television functions as an ideological apparatus: the challenge to achieve the objectives of the Vision 2020.

The above served as the 'ideological themes' generated by all of the groups and used as the *agenda* for the next subsequent analyses. To understand the attitude of the groups further on the 'ideologies', we drew up a decoding pattern according to the Parkin's Theory of Meaning System (1972) that tracked the various meaning positions made in this study.

Parkin introduced *three* types of meaning position: the dominant value-system known as *dominant* meaning, the subordinate value-system known as *negotiated* meaning, and the radical value-system known as *oppositional* meaning positions. Since the value of each decoding positions vary from one to the other, we assigned each decoding with a numerical tag reflecting its degree of dominance. The value ranges from (+3) to (-3), with (-3) carrying the least value of dominance.

The process of making the verdict, which group takes what position and with what value

was the prerogative of the researcher, very much dependent on our intuitions and feelings. To know what decoding the groups make is highly important because in reception studies decoding positions manifest some important 'signals' out of the text the audience come in contact with. This is more so when the concept of 'economic owners' of the television and the concept of 'media as ideological apparatus' were much defended in the Critical School of Thought. Generally when studying reception in developing countries, dominant decoding implies that the television has been effective in defending the government policies and programmes, in whichever way, the status of the government could undoubtedly be enhanced and strengthened. On the other hand, the reverse is also true about the role of television, but more importantly, contradict decoding criticized the dominant power of the dominant class (in this case the Malay Bumiputra), the ruling government, and the completely socio-economical and political structure of the Malaysian system. This is a threat to national stability. Please refer to Table 2 in the next page, for the summary of decoding positions of all groups.

The above table illustrates the pattern of decoding positions assigned to the various ethnic groups and in fact, a graph according to the degree of dominance could easily be plotted out of this data to show the pattern of distribution

TABLE 2
A summary of the decoding of "Miskin" by the various ethnic groups according to the degree of dominance, as in Parkin's Theory of Meaning System (1972)

Decoding Positions & Degree of Dominance / Ethnic groups		Dominant (+1 to +3)	Negotiating (-1 to -3)	Oppositional (-1 to -3)
Malay-	Gp 1 professionals	+2		
	Gp 2 students	+1		
	Gp 3 farmers (Perak)	+2		
	Gp 4 farmers (Kelantan)			-3
Chinese-	Gp 5 professionals		-3	
	Gp 6 students			-2
	Gp 7 general staff		-1	
Indians-	Gp 8 technical staff		-2	
	Gp 9 students		-2	
	Gp 10 laborers	+1		
Sarawakians-	Gp 11 professionals		-3	
	Gp 12 teacher trainees (M)	+1	-1	
	Gp 13 teacher trainee (NM)		-1	

of the decoding position. *Fig. 3* in the next page illustrates the above mentioned graph on the groups' decoding positions indicated by their value of dominance. However, the above table shows that the Malay groups except the Kelantanese (Gp4) represented by the PAS sympathizers fall into the dominant column. The rest fall into either the negotiation column

or the oppositional column, except the Indian laborers, who went under the dominant column. The Chinese students from UPM (Gp6) were rather oppositional to the government. Group10 represented by low-income laborers thought that basic needs to their survival are more urgent than political matters. The Sarawak professionals (Gp11) however, felt that the Bumiputra status

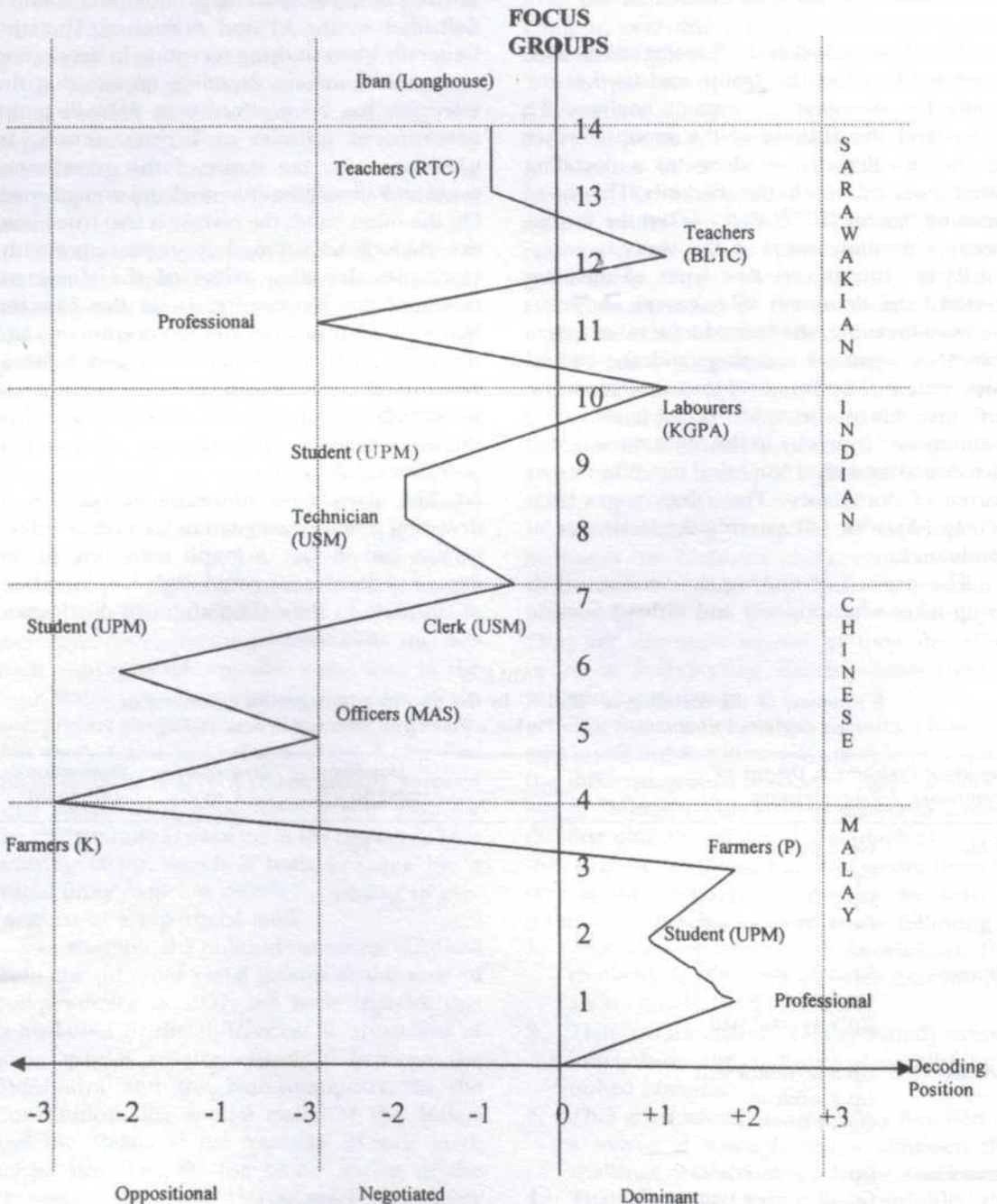


Fig. 3: Graphical pattern of groups' decoding position indicated by their value of dominance

treats the indigenous and the Malays from the Peninsular, rather differently. They also believed that a certain amount of religious discrimination cause the difference in treatment.

The **second level analysis**, which examines the decoding of the four ethnic groups separately, brought up a list of 15 types of 'development ideologies', that is, from the Malay groups, the Chinese, the Indians and the Sarawakians. Comparative analyses on these four decoding were then carried out to locate the most salient issue brought up by the study. These ideologies were as follows:

1. Development is politicized
2. Television is controlled by the government
3. Negative attitude of the poor
4. Problems of the implementers
5. Sympathy towards the government
6. Caring concepts
7. Development programmes in television as propaganda
8. Involvement from the private sector
9. Malay hegemony
10. Economic gap
11. Poverty ruins nation's credibility and image
12. Television as a source of awareness
13. Economic imbalance among regions or states
14. Abuse of the term 'Bumiputra'
15. Education is politicized

The next process was to identify the 'most salient issue' and this was succeeded by counting the highest score in the 'number of mentions' received by a particular issue. This then became our 'perspective' against which a relevant challenge of Vision 2020 is matched. In research, this particular issue is regarded as the 'point of contact' the groups had with the text.

The study found that the politic-biased development policies and programmes became their main concern when discussing economic or national progress. Thus, it represents the meaning that 'binds' all the four ethnic groups together by inscribing their attitudes. Does the Non-Bumiputra have equal opportunities in the economy? Does the new development programme change their traditions in acquiring wealth? For general information, the next most frequently mentioned issue is 'television is not objective', followed by 'the poor attitude of the poor'. Among the least frequently mentioned are 'Malay hegemony', poverty ruins the nation's

image, and 'television as a source of awareness'. This makes our study a holistic one in trying to examine the inter-ethnic reception towards a selected development issue in the country.

The **third level analysis**, however, focused on the attitude and other psychological aspects of the groups who represent the Malaysian nation in conceptualizing the idea that the national development policy is politically-biased towards the needs of the Malays and Bumiputras. More importantly, this examination has brought us further into how this issue relates to the well-being of the different ethnic groups in terms of relating themselves to each other.

The Non-Bumiputra generally agrees on the issue that development needs to be redressed. Nevertheless, they were not in consensus at how the government plans to implement the policy. The Bumiputra members argued that the bases used in the restructuring of this 'untypical' affirmative development policy, were historical rather than logical. Failing to accept this point, they will never be in favor of the dominant ideology.

The 1969 riots were an important point in history, and the development policy resulted from it was mainly structured to 'correct' many of the past 'wrongs' done by the then government. Critiques analyzed that the newly independent government (1957-1969) actually took off on the wrong premise (Mahathir 1970). This naturally requires more than an ordinary reformation. The UMNO-based government demands the dominant Malay's economic needs must continue to be served and protected. Such a development policy will not survive unless it is supported by political regimentation.

The study revealed that justifications on formulating a national development policy that serve every ethnic group's needs are hard to come by. The meanings generated from the comparative decoding analyses were grouped into either the Bumiputra or the Non-Bumiputra type of meaning.

As mentioned earlier, all the Malay groups with the exception of the PAS supporters favored the dominant position. They actually are the beneficiaries of the policy. On the other hand, the Non-Bumiputra with the exception of the low-income Indian group, took either the negotiated or the oppositional stance. This level of analysis resulted in the birth of Bumiputra and Non-Bumiputra dichotomy of meaning. The

following is a list of the 'pro-dominant' meaning of the Bumiputra groups and 'anti-dominant' meanings produced by the Non-Bumiputra groups in this study:

I. The pro-dominant meaning

1. Assistance to the Bumiputra must continue
2. National stability
3. Racial equality
4. Humiliation of being dominant but poor
5. Power for the elected government
6. Responsibility
7. National pride
8. The 'we can' attitude
9. Contra-cultural economies (emigrant's control over the economic welfare of the locals)
10. Heterogeneity causes ethnic orientation in development approaches
11. The special position of the Bumiputra
12. Racial harmony

II. Anti-dominant meaning

1. Development is for 'supporters'
2. Discrimination in eradication of poverty
3. Rural vs urban development
4. Subsidy culture
5. The commercial, industrial and professional Bumiputra community
6. Position led to communalism

The comparative analyses carried out at this level indeed answered the quest to understand how multi-ethnic Malaysians decode development in this country. The study managed to produce an empirical theory that supports the notion that 'audience in modern mediated-societies is complex and at the same time contradictory'; that mass cultural text is complex and contradictory, so much so that the multi-cultural audience who use the multi-layered meaning text, produce a culture of equal complexity and contradiction'. This study also confirmed that the dominant group decided on the dominant decoding position and the reverse is true.

As mentioned earlier, reception studies tradition believed that reception studies would only be meaningful only if they are examined and analyzed within the socio-cultural framework of the society. Ang (1990) raised the status of reception analysis by conceptualizing it as a 'cultural critique' because it is deeply embedded in the political and cultural processes where the

media are a part. Every study is thus differently tailored and unique to its surroundings. This added value to reception is made possible because, unlike the positivist approach, she said, this tradition is far better able to explain the ways in which people creatively make their own meanings and thus create their own new-born culture. That is what underlies the thesis of Cultural Studies, in which consumers are indeed seen as cultural users of mass culture. With that, reception has successfully secured a central place in Cultural Studies.

Findings from this study confirmed this when the **fourth level analysis** brought an important insight where some form of political tension and ideological dilemma did exist when testing the groups' reception on poverty. The television and the groups were indeed involved in a context of power relations when they discussed development or poverty eradication, which is the ideological issue contained in the eighth challenge of Vision 2020. This analysis therefore, is to examine how the different groups decode "Miskin" in relation to the 8th challenge of Vision2020 because it has a direct relevance to socio-economic development in Malaysia – the political scenario which served as the prevailing cultural condition affecting the activities of Vision 2020.

In this study, the vision has created a feeling of dissatisfaction among some groups, in particular the Chinese. They were basically not happy about the idea of middle classing of the Bumiputra; the creation of a commercial, industrial and professional Bumiputra community; and the 30% target for Bumiputra ownership of capital equity in corporate sectors. The new development should not be at the expense of the economic expansion of the Non-Bumiputra members, they claimed. The swing, they said, had affected their businesses and industries. The act of 'ethnicizing' and 'politicking' of the national development was responsible in creating the 'resistance' among them. These notes illustrate some of the central as well as controversial issues emerging from the national development plan constructed during the post 1969 era. In political-cultural terms, this could be understood as disempowerment on the dominant discourse by the minority.

The **8th challenge of Vision 2020**, which aims at "establishing an economically just society in which there is a fair and equitable distribution

of the wealth of the nation, in which there is full partnership in economic progress", implies that happiness and peace will never be achieved as long as identification of race is linked to some economic functions. The government believed that our quest for nation building would not materialize if the nation were unwilling to struggle for economic justice.

The findings indicated that resistance and threats still lived by the people, especially the Non-Bumiputra more so if they are sympathizers of the opposition parties. To them 'special position' makes all the difference. The indigenous people of Sarawak felt that they were treated as 'second class Bumiputra' while the PAS sympathizers found the vision was incompatible with their political ideologies.

However, the response was, in general, encouraging compared to that in the past. This fact points to the economic progress experienced by the country. Despite this, there is always a basis for alarm because inter-ethnic problems have its roots deep down in the history. Nevertheless, we still need to ask some questions. Firstly, to what extent will this affirmative policy remain the dominating factor in upholding or breaking the inter-ethnic relationships, even among the Malays or the Bumiputra? Secondly, will Malaysia have other significant cultural values in the future that will serve as new discourses for interpreting economic justice and development? Further research on reception of development-oriented messages is therefore necessary and needed to ensure that Malaysia will forever preserve the successes she has achieved in her quest for progressive nation building.

CONCLUSIONS

The final attempt of this effort was to test the selected theories used to see whether or not they were able to explain the reception process of Poverty by the multi-ethnic Malaysians. The concept of meaning is indeed a very complex entity. Hence, other related theories other than the Reception theory (Morley 1980) were recruited so as to produce a more meaningful result. The study proved that the Reception theory together with Parkin's Theories of Meaning Systems (1972) and Hall's Theory of Encoding and Decoding (1973) had successfully examined the multi-ethnic Malaysian's reception towards the television programme on development. It dealt with the strengths and

weaknesses of each theory in its process of explaining the attitude and the discourses as far as development is concerned.

In an attempt to add further research value to the study, the analysis did not stop at media-audience relationship but went beyond to evaluate the Malaysian development strategies. The reception of Poverty thus became more social and public worthy. Generally, the 'true' sense of how Malaysians felt about the development systems was then revealed.

The research concluded that, *firstly*, the Reception Theory was successful in accounting for the complexity in meaning making. The different ethnic groups did make sense of the television content "Miskin" in complex and unexpected ways, while the interpretive meanings they produced were social and indeed discursive. Meaning making involved not only the psychological aspect of the decoders but also the interplay of other factors, such as, their socio-cultural discourses, the power relation experiences and the language constraints caused by language rules and codes in the text faced by the different ethnic groups that made up the society. These factors helped to explain why a communication phenomenon might be interpreted in many different ways.

Secondly, the groups' opinion that 'the development policy is being politicized, thus, creating a biased development policy favoring the Bumiputra' was claimed to be the 'preferred meaning' to the programme content. The messages were intentionally structured by the producer and were a reproduction of the hegemonic ideologies. The 'closure effect' concept by Hall (1973) had helped the Malay decoders (especially the Bumiputra) to decode the message as such, thus, making the opinion the dominant meaning. Nevertheless, the non-Bumiputra groups were found to be taking the oppositional position regarding this meaning.

The Bumiputra and the non-Bumiputra differed in their 'critical distance' (in Katz and Liebes (1984) terminology) towards the programme. Likewise their attitude towards what had been manifested by the text also differed among the groups due to the varied discourse the groups experienced. The study theorized in politically-oriented messages or propaganda-typed programmes; the concepts of 'encoding' and 'preferred meaning' are related to the issue of 'intention' of the producer. Preferred meaning

is not the absolute property of the text because textual production is full of language constraints, more so when the content is politicized, much of the meanings are unsaid.

Thirdly, the three decoding positions defined by Parkin (1972) delimited the probability of having extra meanings to the programme content, hence, the intention of generating new insights from the study, if unchanged, would have been much defeated. The decoding position needs to be expanded so that all the complexities in decoding will be accounted for.

Fourthly, media effects are an indirect variable here delivered through the interplay of media in presenting a specific ideology. The conception of effect is being superimposed by the more important role, that is, the reproduction of hegemonic ideology. Effects were translated through the extent of the television in maintaining and defending the State's hegemony. The understanding of effects thus remains with the extent of power the media had in getting the people to think like the dominant powers.

Finally, the National Economic Policy first introduced in 1970 was an inevitable response to the May 1969 racial crisis and had aroused relatively little opposition in principle. Even the non-Malays, especially those from the higher-level income and educated groups, understood the rationale for such an affirmative policy. Post-1990, the Malaysians experienced further consolidation of all of the policies.

RECOMMENDATIONS

Our recommendations are divided into two parts. The *first* was on the communication theories used in this research and subsequently on how to make the process of decoding or meaning making go in tandem with the government development policies. The *second* part was on how to address the issue of 'national unity' with the national development model Vision 2020, as its base.

In the *first* part of the recommendation, the study supported the Reception Theory to account for the complex, unexpected, social, and discursive nature of decoding, but there are a few areas within the theoretical framework that needed modifications. As the content was about development, the 'level of education' and the 'system of education' were found to be significant characteristics of the 'interpretive communities'

to be examined. These factors are worth researching, as they might have been able to explain the tolerance level of the people towards the affirmative development policies in this country.

With regard to Parkin's theory, the gap between one decoding position and the next was rather too wide to accommodate the various characters of decoding. As a result, a detailed account of decoding variations of the groups was unable to be captured exhaustively. We recommend that each type of decoding position be subdivided. The decision on the fraction is however, the choice of the researcher, depending on how detailed the researcher wishes the account to be.

Finally, the Genre theory was equally important in the study of reception. Consideration should be given to whether or not the selected media text is relevant to the decoders discourse. Morley's (1981) recommendations on plotting the 'purchase' (Moore's terminology) of media genre for various categories of decoders, should be given due attention. The question of 'who prefers what' before proceeding into the investigation would help the researcher not to experience 'programme distance' (Moore's 1993).

The *second* part of the recommendation was on national unity. The growing ethnic division had a class texture, which originated in government policy, albeit unintended (Jomo 1994). The non-Malays have been quite tolerant of the current development scenario because of the coalition government concept used by the government. The issue on national unity should be measured using both the traditional economic approach and non-economic approach. The non-economic, which is more of our concern, should work towards nationalizing or 'Malaysianizing' all schools so that 'unity' starts from young. Therefore, the country should reform the school system so that the country is able to remove all identified obstacles to national unity. One of the existing issues in the school systems that is currently bothering the nation is the vernacular system that many people think is hindering national unity. Thus, 'Malaysianizing' the schools will create a new Malaysian society that is willing to watch local media production more and will love the country even more.

Suggestions for future research in media reception are as follows:

Firstly, development-oriented television programmes are relevant media contents for the study of reception in developing countries. More so if they approach the study using the critical audience research tradition. The result will be more holistic considering the socio-cultural and political perspectives that influence the meaning making activities of the media users. As such, more research is needed in developing countries where the selection of such genre is relevant and the ethnographic approach can give a more meaningful finding, while at the same time, able to preserve and maintain the empirical quality of the work.

Secondly, future researchers may adopt the same research framework model to replicate reception studies in other developing multi-ethnic countries having similar backgrounds as Malaysia. The hegemonic status could be crystallized and the roles of the media could further be defined for the benefit of the varied cultured society.

Thirdly, future studies may capitalize the local television news programme to track the reception of various local social groups towards some of the contemporary issues transmitted through the television. A decoding pattern could then be plotted to show the people's attitude toward the issues broadcasted in the programme and their perception on the media's attitude toward the same issues. For programmes communicating foreign-based ideologies, studies could be focused on how reception will be read in the context of the local societal set up.

Finally, a follow up research should be carried out after the year 2000 (five years after the study was carried out), because the character of the interpretive communities might have changed following the changes brought up within the country or globally. Specifically, the study would like to see if the decoding trends of the Bumiputra versus the non-Bumiputra, the Malays versus the non-Malays, the west versus the east Malaysians, have changed. Has the income level factor become very more important than ethics factor in analyzing people's reception in decoding development-oriented programme? Finally, would there be new emerging variables to describe the future social character of the Malaysian society? We believe that the forthcoming research would be able to deliver a comparative

reception analysis 'before and after' the millennium year 2000.

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Relationships between Women in Sarah Daniels' Play "Neptune"

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Keywords: Female solidarity, lesbian-feminist approach, Sarah Daniels, coming out, pre-oedipal bonding, psychoanalysis, female bonding, lesbianism, British playwright

ABSTRAK

Kajian ini adalah satu eksplorasi mengenai perhubungan erat di antara wanita dengan wanita menggunakan teori feminisme dan psikoanalisis untuk menganalisis sebuah drama Inggeris bertajuk "Neptune." Dapatan kajian memberikan faktor-faktor psikoanalisis untuk menerangkan ikatan erat perhubungan antara ibu dan anak perempuan. Ia juga dapat menerangkan bahawa di dalam drama "Neptune" Sarah Daniels memberikan masa depan yang positif kepada dua orang protagonis wanitanya kerana mereka telah diselamatkan oleh ibu mereka Joyce. Daniels menggunakan mitos Demeter-Persephone untuk menunjukkan peluang terhad yang ada untuk protagonis wanita dalam menangani krisis keluarga. Seperti Demeter, Joyce merapatkan pertalian keluarganya dengan menyelamatkan anak-anak perempuan beliau daripada dominasi kaum lelaki: Val daripada suaminya, Colin, dan Claire dan Poppy daripada Lawrence. Pengakuan ikhlas Claire sebagai seorang lesbian telah membawa kesengsaraan kepada dirinya, manakala Joyce pula telah membuat keputusan yang wajar untuk menyelamatkan anak perempuan beliau daripada dibelenggu oleh masalah keluarga.

ABSTRACT

This paper is an exploration of female relationships using feminist and psychoanalytic approaches in reading a British play "Neptune." The findings provide us a unique way of explaining the bondage between mother-daughter relationships, and it also tells us that in the play "Neptune" Sarah Daniels offers a positive future to her two female protagonists because both have been rescued by their mother Joyce. Daniels uses the Demeter-Persephone myth to illustrate the limited choices that her female character Joyce has in handling her family crisis. Like Demeter, Joyce keeps her family together by delivering them from male domination: Val from her unhappy marriage with Colin, and Claire and Poppy from the devious and ruthless Lawrence. Claire's bold and honest public confession of herself as a lesbian has clearly entailed suffering and sacrifice. However, Joyce has made the right decision to help both her daughters to get out of their predicaments.

INTRODUCTION

This paper (appropriating the psychoanalytic interpretation) examines the portrayal of the relationships between women in Sarah Daniels' play "Neptune." It is seen in the context of a lesbian feminist stance that Daniels' play was written, reflecting her critiques of sexology and psychoanalysis which fail to give an adequate and unpejorative explanation of lesbianism, and insisting on the importance of 'coming out' and being proud that one is a lesbian. This reading will provide a reader with an understanding of why and how relationships between women are

seen as negative and limiting. Before delving into a detailed analysis, a brief background of the writer and an overview of the various definitions of lesbianism and the history of love between women are pertinent to help readers understand the work analysed.

From the early 1980s to the middle 1990s Sarah Daniels wrote nine plays which have been both produced and published. Born in 1957 in London, Daniels began to write at an early age and her first play was staged when she was twenty-four. As a playwright-in-residence at the Royal Court Theatre, London since 1984, Daniels

has been able to produce some of the most popular plays there despite the negative criticisms she has received from some theatre critics. Among the awards that she has received for her work are: the George Devine Award for "Neaptide" in 1982; the London Theatre Critics' Award for Most Promising Playwright in 1983; and the *Drama Magazine* Award for Most Promising Playwright, also in 1983.¹

Seeking authenticity in her material, Daniels often conducts research before she writes her plays: for "Masterpieces," she consulted feminist literature on the subject of pornography and attended a meeting of Women Against Violence Against Women; for "Byrthrite," she conducted research into the role of midwives in the seventeenth century; for "Gut Girls," she investigated the history of women's work in the Deptford slaughterhouses; for "Beside Herself," she contacted and interviewed the survivors of child sexual abuse, and for "Head-Rot Holiday" she interviewed ten women who had recently been released from Broadmoor Special Hospital. Despite the fact that most of her plays have been based on true accounts of people's lives, Daniels has been criticised for using "improbable and unrealistic characters".²

"I don't like plays where the audience goes out feeling purged ... I like challenges ... I write issue plays," Daniels remarks in her interview with Lizbeth Goodman in London, dated 11 July 1988.³ This statement explains why most of Daniels' plays are based on controversial issues such as power relations between the sexes and the position of women in "Ripen Our Darkness" (1981); protest against nuclear war in "The Devil's Gateway" (1983); pornography and male violence in "Masterpieces" (1983); women and reproduction in "Byrthrite" (1986); the rights of a lesbian mother in "Neaptide" (1986); the exploitation of working women in "The Gut Girls" (1988); sexual abuse in "Beside Herself"

(1990); women and mental health in "Head-Rot Holiday" (1992); and infanticide and self-harm in "The Madness of Esme and Shaz" (1994).⁴

Daniels' latest play, "Blow Your House Down" (unpublished), was staged and commissioned by Newcastle's Live Theatre in 1995, then toured around the North. It is adapted from Pat Barker's novel (granted with full artistic freedom) about a serial murderer terrorising a Tyneside community of prostitutes. Daniels has also been a visiting lecturer at various universities in Britain and abroad,⁵ a writer of several radio plays and for three television series: "Medics, Grange Hill and Eastenders." She is therefore actively juggling both theatre and television writing.

Various Definitions of Lesbianism

Celia Kitzinger, in her detailed sociological study of lesbian identity in "The Social Construction of Lesbianism" (1989), argues that women who give their individual accounts of their lesbianism basically reinforce rather than resist established norms. Based on the results of her research forty-one self-defined lesbians aged between seventeen and fifty-eight were asked to reply to sixty-one questions regarding their identity. Kitzinger identifies seven distinct accounts of lesbianism. Most of these accounts, she adds, show the great tendency of the respondents to fit into ideals set for them by the dominant order. For example, the accounts which emphasize personal fulfilment, 'discovering one's true self', 'getting in touch with one's own feelings' she sees as unthreatening to the establishment:

To conclude, then, an explanation of lesbianism in terms of personal happiness and self-fulfilment serves to remove lesbianism from the political arena and to reduce it to a private and personal solution. This, then, is an account clearly acceptable in terms of the dominant patriarchal order (Kitzinger, 102)

¹ See Bakker, 'A Critical Analysis of the Plays of Sarah Daniels' for a full account of Daniels' professional work.
² Heidi Stephenson and Natasha Langbridge, (eds.) "Rage and Reason: Women Playwrights on Playwriting" (1997: 7).
³ Goodman, Interview with Sarah Daniels: London, 11 July 1988, in "Contemporary Feminist Theatres," p. 128.
⁴ Daniels' most recent play *Blow Your House Down* (unpublished), first performed in 1995, was adapted from Pat Barker's novel (granted with full artistic freedom), commissioned by Newcastle's Live Theatre in 1994 and received favourable reviews from theatre critics. It is about a serial killer of prostitutes in a Tyneside community.
⁵ Daniels was a visiting lecturer at Guelph University, Ontario, Canada, summer 1990; she was the recipient of the M.Thelma McAndless Distinguished Professor Chair in the Humanities at Eastern Michigan University, winter semester 1996; and an invited speaker at the 1991 International Women Playwrights' Conference in Canada. See Bakker, p.229.

Two other equally acceptable lesbian accounts are based on "the concept of lesbianism as a private sexual preference or orientation, as natural and normal as heterosexuality" and "the ideology of romantic love" (Kitzinger 1981). Again, both accounts are morally acceptable to the dominant order because they are essentially personal experience. The only unacceptable account of lesbianism, one that provides a genuine challenge to the heteropatriarchal establishment, is the radical feminist one:

The great achievement of the radical feminist lesbian account of lesbian identity is to alienate and disturb proponents of all other lesbian identities. This hostility is derived from the fact that this account of lesbian identity fails to explain and justify lesbianism in terms familiar and acceptable to the dominant order: instead it attacks that order, presenting lesbianism as an explicit threat to society (Kitzinger, 118-19).

Here, the women who give this account of themselves claim that their lesbianism is an active choice; they were not born lesbian, nor do they identify themselves as 'gay women'. They do not see themselves in alliance with 'gay men'.

Similarly, the Lesbian History Group in their book "Not a Passing Phase" (1989) insist that heterosexuality is neither 'normal' nor 'natural' sexuality; rather, it is culturally constructed in order to organise social relationships under male dominance. The group argues that:

Heterosexuality, as an institution, not just a sexual preference, exists to subordinate women and wrest from them their physical and emotional energies for men's use. To create this political institution, women born with the capacity to relate emotionally and sexually to persons of either sex, are deliberately conditioned into heterosexuality by being deluged with heterosexual images and role models (lesbian images and models being systematically excluded or distorted), and by being taught that heterosexuality is normal and natural. This ensures that women as a rule 'fall in love' with and attach themselves to men. However, this

socialisation does not always work (Lesbian History Group, 13)

This is also saying that in order to enforce heterosexuality, lesbians have to be pathologised and criminalised by male supremacy. Lesbian feminists refute these views and believe that becoming a lesbian is a political choice; a commitment to be with women.

HISTORY OF LOVE BETWEEN WOMEN

In the late 1970s and early 1980s, lesbian and feminist historians such as Carroll Smith-Rosenberg and Lillian Faderman focused their interest on women's passionate friendships and traced these relationships from the sixteenth to the early nineteenth century, using a variety of novels, letters and diaries of middle-class women in America and Europe.⁶ In her essay "The Female World of Love and Ritual" Smith-Rosenberg shows that middle-class women in the eighteenth and nineteenth centuries who indulged in romantic same-sex love did so with social approval. She explains that such relationships between women were necessary and approved by men because they helped women who were going through a difficult period of adjustment in heterosexual marriages.⁷

In "Surpassing The Love of Men," Faderman traces the changes in society's attitudes towards lesbianism - as an encouraged source of intimate confidantes; as idealized romantic friendships, and as lesbian-feminists' (first-wave feminism) redefinition of the meaning of love between women. However, she finds that same-sex relationships between women came to be seen in the late nineteenth century as a threat as women began to challenge male dominance with the changes in social and economic circumstances which permitted middle-class women the possibility of living and working independently outside the structures of heterosexuality. This change in society's attitude, argues Faderman, was also due to the publication of French

⁶ See Carroll Smith-Rosenberg, 'The Female World of Love and Ritual: Relations Between Women in Nineteenth Century America', in N.F. Cott and E.H. Pleck (eds), *A "Heritage of Her Own"* (1979), pp.311-342; and Lillian Faderman, "Surpassing the Love of Men: Romantic Friendship and Love Between Women from the Renaissance to the Present" (1981).

⁷ Smith-Rosenberg does not underestimate the importance of passionate friendships. She explains that women "lived in emotional proximity to each other. Friendships and intimacies followed the biological ebb and flow of women's lives. Marriage and pregnancy, childbirth and weaning, sickness and death involved physical and psychic trauma which comfort and sympathy made easier to bear. Intense bonds of love and intimacy bound together those women who, offering each other aid and sympathy, shared such stressful moments." See Smith-Rosenberg, p.328.

pornographic novels, the development of anti-feminism, and the sexologists' 'discovery' of lesbianism as a disease. Faderman and Smith-Rosenberg sees the sexologists as playing a major role in discouraging and stigmatizing passionate emotional involvement between women by classifying and categorizing female homosexuality and passionate friendships as an abnormal form of sexuality. Another lesbian and feminist historian, Sheila Jeffreys, concurs with Smith-Rosenberg and Faderman in criticising the sexologists for considering "homosexuality as innate" (Henry Havelock Ellis); as "a hereditary taint" and unchangeable (Richard von Kraft-Ebing); as the practice of "a third or intermediate sex" (Edward Carpenter); and as "a result of childhood trauma" (the work of psychoanalysts from Sigmund Freud onwards) in her historical review of feminism and sexuality in 'Women's Friendship and Lesbianism'.⁸

Faderman details the attempts of the sexologist Havelock Ellis and the psychoanalyst Freud to explain the same-sex inclination in women. She summarizes Ellis's findings concerning sexual inversion in women: he believed that it "was due to 'cerebral anomalies', that it was the sign of 'an inherited diseased condition of the central nervous system' and a 'functional sign of degeneration'" which "he consistently referred to as 'taint'⁹"; she adds that this belief has been most influential on the popular view of homosexuality derived from works written in English (Faderman 1981). As a result of Ellis's view, asserts Faderman, women who were independent, assertive, and showed feminist tendencies came to be associated with lesbianism; such qualities of women in the 1890s prefigure those condemned in early twentieth century Britain (Faderman 1981). In 'The Psychogenesis of a Case of Homosexuality in a Woman' (1999) Freud theorizes a sixteen-year-old girl's desire for an older woman as a masculine attribute and combines his discussion of her penis envy with feminism:

As a schoolgirl she was for a long time in love with a strict and unapproachable mistress, obviously a mother-substitute.[...] From very early

years, therefore, her libido had flowed into two streams, the one on the surface being one that we may unhesitatingly designate homosexual. This latter was probably a direct and unchanged continuation of an infantile mother-fixation.[...]The analysis showed, further, that the girl had brought along with her from childhood a strongly marked "masculinity complex." A spirited girl, always ready for romping and fighting, she was not at all prepared to be second to her slightly older brother; after inspecting his genital organs she has developed a pronounced envy for the penis, and the thoughts derived from this continued to fill her mind. She was in fact a feminist; she felt it to be unjust that girls should not enjoy the same freedom as boys and rebelled against the lot of women in general (Lesser and Schoenberg, 1999:29).

Faderman argues that Freud, insisting on the masculinity of homosexual desire in woman, has failed to conclude that it is not the 'penis' that the young girl is envious of, but male freedom and what the penis signifies in her society" (Faderman 1981). Freud's explanation suggests that female homosexuality is not a "normal path" to womanhood; it is a complex to be overcome. Unlike the hysteric, who is still tolerated by society because she is not a threat to the family as an institution, the woman with a 'masculinity complex' is dangerous because of her rejection of patriarchal marriage or relationships with men. In her chapter on 'The Spread of Medical Knowledge' Faderman points out that many medical men continue to believe that noncongenital homosexuality may be cured and converted to heterosexuality, that love between members of the same sex is "a psychic disease and is curable by psychic treatment", and that most homosexuals suffer from some form of neurosis" (Faderman 1981).

Faderman gives the example of Radclyffe Hall's "The Well of Loneliness" to explain the popular application of the sexologists' definition in literary works (1920s): the heroine of the story is a 'masculine invert' (following Ellis's definition), suggesting an unchangeable congenital trait. By adopting this sexological explanation, says Faderman, lesbian identity is

⁸ Jeffreys, 'Women's Friendships and Lesbianism', "The Spinster and Her Enemies: Feminism and Sexuality" 1880-1930 (1985: 112). See also Jeffreys, 'The Creation of Sexual Difference' in "The Lesbian Heresy: A Feminist Perspectives on the Lesbian Sexual Revolution" (1994: 1-19).

⁹ Quoted in Faderman, p.241.

able to receive some measure of public sympathy and tolerance as it is a genetic flaw and cannot be avoided. However, she still condemns sexuality for categorizing lesbianism as a form of congenital perversion because as a result:

[...]many women fled into heterosexual marriage or developed great self-loathing or self-pity if they accepted the label of 'invert'. By the early twentieth century, European popular literature, influenced largely by the sexologists, was referring to 'thousands of unhappy beings' who 'experience the tragedy of inversion in their lives,' and to passions which 'end in madness or suicide.' In the popular imagination, love between women was becoming identified with disease, insanity, and tragedy. It soon became a condition for which women were advised to visit a doctor and have both a physical and mental examination (Faderman, 252).

As a lesbian feminist, Faderman sees this sexual categorization of lesbians as negative because it constitutes a form of social control imposed on women who love women and destructive of solidarity between women.

Another influential notion derived from sexology is that of role-playing by lesbian couples. Faderman cites an example from Freud's "The Sexual Aberrations" where he distinguishes 'the active invert' ("butch") from the 'passive' ("femme") (Faderman 1981). She adds that Radclyffe Hall seems to use only these two types of lesbians in her work but explains that neither Hall nor Freud were aware of the influence of social roles in a patriarchal culture, which some lesbians relationships were imitating because these were "the only examples of domestic situations available to them [...], that they often felt compelled to force themselves into these roles and did not assume them by inborn or trauma-acquired impulses" (Faderman 1981). What Faderman is saying is that lesbian feminists reject the sexologists' categorization of lesbianism as perverse, evil or sick, and do not adopt either the appearance or attitudes of men or heterosexual role-play because lesbians are 'women-identified', women who give "their energy and commitment to women's interests" rather than

to men's.¹⁰ It is in this context of a lesbian feminist stance that Daniels' play "Neptune" was written, reflecting her critiques of sexology and psychoanalysis which fail to give an adequate and unpejorative explanation of lesbianism, and insisting on the importance of 'coming out' and being proud that one is a lesbian.

Staging of Love between Women

"Neptune" was first performed in 1986 at one of the most prestigious venues in Britain, the Cottesloe in the Royal National Theatre, London. According to Sandra Freeman (1997), writing on lesbian theatre, it is the only lesbian play "to have been performed there before or since" (158). In "Neptune," Daniels' critiques of the negative images associated with lesbianism throughout the play reveal pronounced affinities with Faderman's ideas. Daniels uses the setting of an all-girls school to illustrate socially unacceptable, passionate and sensual relationships between women in 1980s Britain and depict the 'coming out' of a young lesbian teacher, Claire, to her colleagues. While in her other plays "The Devil's Gateway" and "Ripen Our Darkness" Daniels confines lesbian relationships to minor sub-plots in each play, in "Neptune," Claire's coming out and the repercussions it entails in her life constitute the main story line. Here, the right to be a lesbian is championed by three generations of women, represented by Diane, a seventeen-year-old schoolgirl, Claire herself, and Bea, the headmistress, who is in her fifties. The two older women's lesbian consciousness is triggered by Diane's boldness and fighting spirit. She sets an example for them by disclosing her sexuality in school even under the threat of expulsion.¹¹ At the core of this central plot is Claire's struggle with her ex-husband, Lawrence, for the custody of their seven-year-old daughter Poppy. Claire, who has no current lover and shares a flat with her heterosexual friend Jean, pretends to be a 'normal' woman and remains 'in the closet' to secure a favourable verdict from the court. By doing so, Claire can deny her sexuality and remain 'safe' in her silence.

¹⁰ Faderman, p.377. The term 'women-identified' was coined by New York Radicalesbians in their May 1970 essay "Woman-Identified-Woman". See "Lesbians Speak Out" (1974: 87-89). See also Hoagland and Penelope (eds), "For Lesbians Only: A Separatist Anthology" (1988: 17-22).

¹¹ I have used the term 'lesbian consciousness' in a loose sense to designate the character's realization and acceptance of her true nature of sexuality and also her 'coming out' to the public or other people.

Jeffrey Weeks' explanation of 'coming out' illuminates the importance of sexual revelation among gays and lesbians. He suggests in "Coming Out" (1977), that there are three important stages of sexual revelation: first is coming out to oneself, accepting one's own "homosexual personality and needs"; second is coming out to other "homosexuals, expressing those needs in a gay community and in relationships"; and finally, "and most crucially, it means coming out to other people, declaring, even asserting, [one's] sexual identity" to everyone (192). Therefore, it is clear that coming out to the public is the most important stage in which lesbians (or homosexuals) assert their identity and practise their sexuality despite social prejudice. In "Neptune," the concern with coming out involves the three women mentioned earlier. Diane is openly comfortable with her lesbianism and wants everyone to know of her sexuality; Claire does not want to reveal her sexuality for fear of losing her pending custody trial for her daughter; and Bea is a successful professional woman and sees no point in jeopardising her career by revealing her lesbianism. However, as the play proceeds, Claire and Bea gradually change their minds about behaving according to their principles. In Scenes Four and Five (Part One), Daniels dramatizes the lesbian crisis in the school with the discovery of the deviant sexual behaviour of Diane and another sixth-former, Terri; the two girls are caught kissing in the girls' cloakroom. This incident triggers the display of homophobia by the teachers in the staff room as they gossip about Diane, who is also suspected of writing "[the] phone number for [...] gay switchboard" (262)¹² on the toilet wall. While the other teachers voice their prejudices against lesbianism, Claire, who is also in the room, initially pretends not to hear and hides behind a newspaper. However, later, feeling rather irritated and disgusted, Claire attempts to defend the girls (unsuccessfully) by saying that kissing between women is "natural" when it is "for comfort" (265). Another teacher, Linda, the games mistress, who is later revealed as a closeted lesbian, also tries to defend the girls by saying: "I practically had to prize Terri off one of the boys from Drylands Park on the playing field this afternoon" (265). In both scenes Daniels' intention is twofold: to

reveal some of the stereotyped prejudices regarding lesbianism in 1980s Britain, and to portray Claire's oppression as a closeted lesbian trying to cope with her colleagues' prejudice. Her colleague Annette says, "It's the parents I feel sorry for" (265); Marion is adamant that she will not tolerate any lesbianism in the school because "it's certainly not the age of perversity. Not in this school anyway. We must be on guard for hanky-panky or horseplay" (262); and Roger remarks that such girls are "bent genes" (265) in the family tree, and that "it only affects women who can't get men" (266).

Daniels' critique of the negative stereotyping of 'butch' and 'femme' role-playing in lesbianism is implied in Diane's relationship with Terri; more hostility is shown towards Diane because she, being more aggressive and masculine in appearance, is assumed to take the role of "butch" (262) lesbian, as opposed to 'femme', signifying that she is usurping the role of the male. As Faderman observes, "it was not the sexual aspect of lesbianism as much as the attempted usurpation of male prerogative by women who behaved like men that many societies appeared to find most disturbing" (Faderman, 17). Terri, who is viewed as "quite attractive" (264) or 'femme' is not seen as threatening because she plays the feminine role, to be easily seduced and lured into lesbianism by the "hermaphrodite" (286) Diane. This scene illustrates Daniels' lesbian feminist stance, from which she critiques society's use of heterosexual role-play to stigmatize lesbians.

As the play progresses Daniels indicates that Claire has become increasingly sensitive towards the verbal abuse hurled at her lesbian students and her conscience will no longer allow her to remain silent, as we shall soon see. In Scene Six (Part One) the two girls, Terri and Diane, are summoned by Bea for interrogation about their sexual misdemeanour. While Terri denies the accusations by supplying evidence that she is heterosexual, Diane boldly declares that she is a lesbian. Bea lets Terri go but orders Diane to remain silent about her sexuality, or face expulsion from the school. After reprimanding Diane, Bea promotes Claire to acting deputy head. Her first task as Bea's deputy is to handle the case of the "sexual perverts" (272) in the school. Claire suggests that Diane should be sent for counselling

¹² This page number and all the subsequent page numbers for Daniels' text refer to "Neptune" in Sarah Daniels, *Plays: One* (1991).

to a qualified Educational Psychologist, Jean Boyd (Claire's housemate). Later that same day, Claire explains the situation to Jean and asks if she would agree to counsel the girl. Jean agrees but advises Claire not to reveal her sexual identity in order to protect the girls, to which Claire replies: "Throughout the day I invalidated myself three times" (276). Here, Daniels is indicating Claire's first pricklings of conscience at not being her true lesbian self.

Claire's conscience becomes increasingly troubled when she is given another task: to discover if there are any other lesbian girls and take disciplinary action. As the new deputy head, Claire is pressured to conform to the norms of the establishment and play her part in denying the girls' right to choose their sexual identity. She offers to read a declaration (obviously Diane's) in the school magazine to the other teachers in Scene Nine (Part One):

CLAIRE (*reads*). Women should never again have to apologize for loving each other. How natural is it to spend your life in service to a man? When I deny through silence I am only reinforcing my isolation. I am a lesbian and I am not alone(287).

Here, Diane is appealing to other lesbian schoolgirls to 'come out' too and not to suffer in "isolation", stressing that concealing one's sexuality is painful and that those who remain silent cannot hope for emotional support from others. Another anonymous article, a tirade condemning the school, is equally provocative and confrontational:

MARION (*reads*). It is about time the education system recognized the hypocrisy it transmits while trying to be liberal in its purporting to care for the individual. Its liberalism is total reactionary rubbish and sexist crap. We are not allowed freedom of choice over our sexuality, which if it is different to that as suggested by the hierarchy of this establishment, is evil. We have a right to our identity and we are not going to be silenced by a smack in the gob from this fascist, poxy school(288).

Diane's boldness in publishing her confession of lesbianism, and the other article attacking the school's biased policy drive Bea to draconian measures in order to control the outbreak of lesbian sexuality. To curb the "epidemic"(298) of lesbianism Bea instructs the teachers to catch and "send every girl in the school who could possibly be a [lesbian]"(291)

to her for punishment. Bea's attitude here indicates how far removed the attitudes of the 1980s are from the acceptance by earlier times that love between two women could be asexual, "considered noble and virtuous in every way", and even thought to be of help to train a woman in love which could later be redirected to a man, as noted by Faderman (Faderman, 16). At this point, when asked by Bea whether she approves of the latest lesbian revolts, Claire's immediate response is still to hide her real sexuality and pretend to condemn the magazine articles: "No. (*Slight pause.*) I mean...it's dreadful, disgraceful, disgusting"(288), said awkwardly and untruthfully (indicated by the pause and ellipse in her sentence when answering Bea's question).

Finally, Claire's confrontation with her student Diane in Scene Eleven (Part One) represents a turning point in her attitude towards her own sexuality. Initially she is angry with Diane for "coming out" and urges her to be silent (Marion is eavesdropping):

CLAIRE: (*noticing MARION and talking more softly*). Try to be...

DIANE: (*angry*). No. I'm not going to try to be anything, least of all forcing myself to act normal. I hate the word, normal is a lie. You're always on about change, well I don't know about you, but I intend to change things.

Exit MARION.

CLAIRE: Standing in the dole queue won't change much. The only way to change the system is from within.

DIANE: (*flatly*). Cop out.

CLAIRE: You think so?

DIANE: Every day making another compromise until you become so demoralized you hate yourself. (*Long pause.*) What about all those thousands of women who were burnt as witches? It was you who told us that it was because they were independent and men were frightened of them. (*Silence. CLAIRE still doesn't respond*).

CLAIRE: Something stupid, like how nice to be seventeen when the only dirty word is 'compromise' (295-96).

Diane's determination to deal with her lesbianism in a confrontational way makes sense to Claire. It leaves her thinking hard about herself as a teacher who preaches about "change" but does not allow change in herself.

As a result of her confrontation with Diane, Claire decides to "come out" in Bea's office; the headmistress' reaction is one of shock and disbelief:

- BEA. Hell fire, it's an endemic. (*Then.*) No, no, you can't be, you're married and ...
 CLAIRE. Divorced. Don't you mean epidemic?
 BEA. And you've got a little girl. What nonsense. I know what I mean, it's your vocabulary that's flagging.
 CLAIRE. I left my husband to live with a woman. Anyway, it's not a disease of any description (297-98).

Claire's confession triggers Bea's disclosure of her own lesbianism but she urges Claire not to reveal her sexual orientation for the sake of their careers. Bea warns Claire that if she were to reveal herself, there would be only one option left for her; that is, to resign. Failing to persuade Bea to see things her way, Claire demands that Bea sack her and refuses to tender her resignation. Daniels' depiction of lesbianism as an "epidemic" echoes the 1920s' anxiety about the spread of lesbian "disease", the fear of women leaving their heterosexual marriages for lesbian relationships (Jeffreys, 120).

Claire's 'coming out' is strongly opposed by both Linda (Claire's colleague) and Jean (Claire's housemate). In Scene Two (Part Two) Linda admits that she is also a lesbian but disagrees with Claire's decision to "crucify" herself by revealing her sexuality because she herself, especially as she is games mistress - "I can see them in the shower for Christsake" (306) - would not be able to cope with the shame and humiliation that would follow her coming out and adds: "besides it would kill my mother" (306). Similarly, Jean discourages Claire from revealing her sexuality:

- JEAN: For God's sake, Claire, compromise your principles.
 CLAIRE: It's not a principle we're talking about. It's me. And what do you think I've done. I've compromised myself so much I've lied my way out of existence.
 JEAN: Then why wreck it over some headstrong schoolgirl who probably wouldn't bother to turn around to thank you?
 CLAIRE: (*furiously.*) Wreck it? Wreck what? Something I've got very little hope of and absolutely no control over when the system dictates the outcome before the ushers clapped eyes on you. When welfare officers write down the names of books with the word 'woman' in

the title and incriminate you. To be humiliated and ridiculed by a group of men and to gradually believe that the only thing that would change them is a bullet through the head. What sort of world is it where I have to plead for my own daughter? (314)

Here Claire realizes that she is no longer able to compromise. She has become a lesbian-feminist who must condemn patriarchal society and its law where "a group of men" set the rules, where she has to "plead" for her own daughter. As Faderman says, "[e]ven if they do not suffer personally - if they do not lose their children in court or if they are not fired from their jobs or turned out by their families because of their political-sexual commitments - lesbian-feminists are furious, knowing that such possibilities exist and that many women do suffer for choosing to love other women" (Faderman, 413). Daniels makes it clear that Claire's emotional distress is not caused by her identity as a lesbian, but rather by her own hypocrisy ("I've lied my way out of existence", 314); her guilty conscience for not doing enough to help her lesbian student in trouble ("I was beginning to feel very guilty about being a Judas", 305); and by the threatened loss of her daughter ("What sort of world is it where I have to plead for my own daughter?", (314). Claire's anger is even more aggravated when Roger, who knows about her personal background and pending custody case, approaches her and offers "to say on oath in court"(307) that they are having a heterosexual relationship to counter her ex-husband Lawrence's accusations, but in return for his help Roger wants his reward - to "consummate" (307) their relationship.

Towards the end of the play (Part Two, Scenes Four and Five) Daniels dramatizes the coming together of lesbians to help each other. For example, Diane and Terri join forces to help their teacher, Claire, with her fight for custody by personally appealing to Bea at her house. While there the girls accidentally discover that Bea is also a lesbian, living with her lover Florrie. Armed with this new information, the girls bargain for a lighter punishment for themselves and also request Bea to "testify for Mrs. Anderson [Claire]"(323) in court; Bea agrees to testify and rules out the expulsion of Diane. Finally, in Part Two, Scene Five, Daniels shows a scene outside the courtroom, where Bea has come to support Claire:

- BEA. I'm here to offer what support I can.
- CLAIRE. Thank you. (*Pause.*) And what of Diane *et al*?
- BEA. I'm still negotiating with them. Oh, absolutely no question of expulsion. We are simply haggling over the new section of the history syllabus. But I'm very much hoping for a settlement on the word 'spinsters'. But first things first. I've explained to your barrister that should it be necessary I will testify to the fact that you are my deputy and an excellent teacher.
- CLAIRE. Thank you.
- BEA. Whatever else, I do understand about loss especially when it can go unrecognized or without a glimmer of sympathy from those around you.
- CLAIRE. I've got a lot on my side, a good home and career and, if I say so myself, I'm a very good mother.
- BEA. You're not going to be judged on the quality of your parenting but on the basis of your sexuality (324).

Claire is too optimistic about the court hearing and Bea reminds her that it is her "sexuality" which is on trial now, not her other attributes. Also in this scene Daniels shows Lawrence's barrister confiding in him that the verdict is a "foregone conclusion" because "Everything's in [his] favour" and promises him that they "will have dismantled every right she[Claire] thought was hers"(324). Despite this portrayal of the conspiracy between the law and patriarchy against lesbianism, Daniels still promotes 'coming out of the closet' as a positive choice for the lesbians in her play: the two schoolgirls achieve liberation by refusing to hide their sexuality and their actions raise the consciousness of the two older women, giving them the courage to stand up for their right to practise a sexuality which is denied by society.

In "Neptune," besides the dramatization of lesbianism, Daniels also turns to myth and legend to convey a close and yet ambivalent relationship, the mother-daughter dyad, which has received a good deal of attention in recent feminist and psychological theory on both sides of the Atlantic.¹⁵ The use of mythical figures may be seen in Daniels' play "Ripen Our Darkness" where Mary represents the image of the submissive woman associated with the figure of

the Virgin Mary; and in "Neptune" the goddess Demeter represents the mother-figure who rebels against her separation from her daughter, Persephone. If in "The Devil's Gateway" and "Ripen Our Darkness" Daniels portrays brief mother-daughter relationships, in "Neptune" the bond is given further attention, enhanced by the use of myth applied to a contemporary situation, and given a radical lesbian feminist slant to strengthen her victimized female characters.

To be able to make a connection between the Greek myth and Daniels' "Neptune," a summary of the Demeter-Persephone story is necessary to enhance the reading (refer to Nini Herman, 1989). Persephone, Demeter's virgin daughter by Zeus, and her first born, was picking flowers in a field with her maiden friends (Athena and Artemis) when a beautiful narcissus flower caught her youthful eye. As she ran to pick up the flower, the earth opened at her feet. Hades, the middle-aged God of the Underworld, carried the maiden off to live with him in the realm of death. In rage and dark despair, the grieving mother turned wanderer to find her daughter. When the search proved unsuccessful she threatened to put an end to each and every growing thing, as was within her power as the Goddess of Life. All growth on earth then ceased, and Zeus was compelled to intervene. He sent his messenger to Hades to make the famous pact whereby Persephone was to divide her time between her husband and her mother. Before Persephone left her husband in the Underworld he gave her the fateful seeds of the pomegranate. As the fruit was cut, bright red juice was spilt like blood to symbolize that the girl was no longer a virgin. She had undergone a transformation. The seeds themselves represent unbreakable union, or marriage between man and wife. Hades also promised his wife that as his queen she should be mistress of her own domain and might rule however she wished. Mother and child were reunited but Demeter's happiness was shattered on hearing that her child had eaten the pomegranate seeds which her husband had offered her. Now her daughter would never belong to her as before. While they were together vegetation would grow, only to die back every year during their separation.

¹⁵ See Nancy Chodorow, "Reproduction of Mothering: Psychoanalysis and the Sociology of Gender" (1978); Dorothy Dinnerstein, "The Rocking of the Cradle and the Ruling of the World" (1987); Adrienne Rich, "Of Woman Born: Motherhood as Experience and Institution" (1977).

Although the abduction and rape of Persephone and the consequent loss of her mother is the main story line, the myth also shows that a daughter belongs to her mother first, her relationship to husband or child is secondary. This mother-daughter tie resembles Freud's preoedipal phase in infancy, where there is no room for the father in that dyadic embrace; the phallic mother is the sole caretaker and the source of nurturance for the child. While Persephone was returned for half the year to her mother, Athena, who sprang straight from the brow of her father, Zeus, in a second birth, armed like a man; Artemis had as a child asked her father to give her a bow and arrows in place of finery, became a hunter and remained chaste.¹⁴

In Daniels' version Demeter has four daughters: Psyche, Athena, Artemis and Persephone. Psyche becomes the Queen of Love after marrying Eros, the son of Aphrodite, and is doomed to love her husband "in ignorance" (308). Athena never returns home and proposes to Zeus that she should be reborn as a man, thus forgetting "her earthly female origins" (308). Artemis returns home and asks to be consecrated to the moon "so that no matter how far she'd have to wander, she would never forget, never betray" (308-9). Only Persephone, rescued from Hades, "belonged to her mother" because she is "Demeter's gift to herself" (239). As the play proceeds, the mythical figures become firmly connected to the characters in the play. For example, in Part One Scene Two, it is Poppy who points out that Joyce is Demeter; the grandfather, Sid, is Zeus; Val, the unhappy housewife, is Psyche; Sybil, who wanders far in America, is Athena; Claire, her divorced lesbian mother, is Artemis; and Poppy herself, who is about to be taken by her father for full child custody is Persephone. But Daniels' Joyce/Demeter does not have the power over life of the goddess; she is just an ordinary mother with old-fashioned ideas, especially about sex, marriage, and sexual orientation. Yet, like the goddess, she manages to rescue her daughters: Claire from having her young daughter 'abducted' by the middle-aged Hades (Lawrence); and Val from her unhappy marriage to Eros (Colin) because both daughters belong to her; "neither husband nor child nor stranger would

ever claim her [daughters] as his own" (239). Daniels uses the Demeter-Persephone myth, which offers a relatively happy ending and presents women as strong characters, rather "than Cinderella or *Sleeping Beauty*" (240); such stories of success and failure picture stereotypically obedient maidens who are kept in domestic slavery like Cinderella; tied to their spinning wheels or locked up in towers, and put to sleep for a hundred years like *Sleeping Beauty*.

As "Neaptime" opens, Val is already in a psychiatric ward for "plenty of rest" (235) with two male doctors discussing her state of mind as a female nurse hovers in the background. At the end of Scene One Joyce comes to visit Val and Daniels presents an image of an apparently superficial mother-daughter relationship. Through stage directions and the conversation between the two women Daniels shows that the mother is in a state of denial concerning her daughter's disorientated condition and her failure to cope with her married life:

Enter JOYCE. She crosses to the bed, pulls up a chair and sits down very unconfidently.

JOYCE: Hello love, how are you feeling? (*Pause.*) Don't worry about the boys, they're fine. We took them to playschool this morning. They were ever so good, no tears or nothing and I'll collect them for as long - (*She stops herself.*) - for as long as they want to go. (*Pause.*) Colin's rearranging his timetable at work so not to worry. He sends all his love. (*Pause.*) He's beside himself, I mean he's very concerned. Well, we all are, we all are. For you. That you get well, back to your old self. (*Finally.*) Have you got a message for him? (*Silence.*) Val?

VAL: (*quietly*). Here I sit, mad as a hatter with nothing to do but either become madder and madder or else recover enough of my sanity to be allowed back to the world that drove me mad.

JOYCE: (*shocked*). I don't think I can remember all that. What on earth possessed you to come out with a mouthful like that?

VAL: I didn't say it.

¹⁴ There are several versions of the myth. The one summarized by Phyllis Chesler is closest to Daniels' feminist interpretation of the myth.

JOYCE: (*gently, slightly patronisingly*). Oh, Val, who did then? The washstand?

VAL: Some woman years ago. I don't think there are any original states of mind left to reclaim.

JOYCE: (*sighs*). Val, love, this won't do. Now, I've brought you a clean nightie and two flannels (237).

As indicated in the stage directions, Joyce "sits down unconfidently" and the pauses between her initial sentences show that there is disconnection and awkwardness between mother and daughter. Val is obviously not listening to her mother and tries to reveal her state of mind by saying "Here I sit, mad as a hatter" but her words are dismissed "patronisingly" by Joyce as nonsensical. Both feel the need to hide the extent of their pain from each other, causing more anger and depression since nothing is achieved; Val's distress is increased by her mother's inability to talk openly and freely about her own anxieties as well as Val's, and to have any empathy with her daughter's pain. The mother here is "shocked" and refuses to believe that her daughter is on the brink of psychosis ("mad as a hatter").

In Scene Two Daniels provides more clues to Joyce's relationship with her daughters; this scene takes place two days prior to Val's hospitalization where the family celebrate Mother's Day at Claire's house. Joyce is clearly disappointed with the state of her three daughters' adult lives, although she denies it repeatedly:

CLAIRE: Mum, we've done all right. Everything considered. And we owe that to you.

JOYCE: (*to CLAIRE*). I've taken enough blame for everything. Don't start on me.

CLAIRE: Look Val and I went to university, neither you nor Dad went there. And we weren't pushed into it like loads of others. Mum, you were always saying don't get married like you did at nineteen and regret it.

JOYCE: Regret it? Regret it? What have I got to regret? I might have said don't get married at *sixteen*, but I didn't say don't get married at all or fornicate or emigrate or crack up or go the other way or whatever. My God, I wanted three daughters like the Brontes and I ended up with a family fit for a Channel Four documentary. Regrets, me? It's you lot that should have regrets (247).

Joyce criticizes Jean (Claire's heterosexual housemate) who is an unmarried mother and indulges in "fornication"; Sybil for emigrating to New York; Val for "cracking up"; and Claire for being a lesbian or "going the other way". In fact, Joyce is a mother who continues to deceive herself and her children by failing to recognize that her children lack the ability to be a phallic mother like her, an omnipotent maternal figure who can cope with everything. She is able to care for all her offspring and also maintains a good marriage with her husband. Here, Daniels is saying that a heterosexual mother expects her daughters to experience the same life that she has gone through - the experience of getting married, having children and caring for the family; and that no other life is considered possible. The mother can only offer 'demure' literary figures like the Brontes, who, she thinks, were stereotypical Victorian daughters, as ideal role models for her children. She sees her daughters as extensions of herself and is incapable of conceiving otherwise. While Joyce chooses to confront Claire openly, with Val, on the other hand, she seems to avoid direct engagement with her daughter's feelings of pain, despair and bitterness, shown by her refusal to discuss Val's illness truthfully and openly. For example, when Claire asks how Val is doing Joyce interrupts, saying "just not been herself, right now...lately." (243-44) and discourages Claire from asking Val more intimate questions: "Now don't you start probing and upsetting everyone" (243-44). Then, when Val quietly says "One by one we all file on down the narrow aisles of pain alone" (244), Joyce hears her remarks but chooses "not to take this up" (244). And again, when Val remarks: "The distortion of abortion is a Catholic contortion from which I can only conceive that the Papist is a rapist." (245) in retaliation to Joyce's statement that "Val could have been a poet" (244), Joyce chooses to evade or deny Val's increasing state of depression and disorientation by saying "Well, you haven't been feeling very well lately, have you? No, no, we won't go into that now. Every day in every way getting better all the time. You look much better than when I last saw you. Doesn't she?" (245). Again, this shows that Joyce is unreceptive to Val's unconscious pleas for her to pick up the signals of her present deteriorating state of mind and not to let her slide into deeper depression. Much later, in Part One, Scene Seven, the

audience is informed by Joyce that she is not as close to Val as Claire is when she asks Claire to accompany her to Val's house (just before Val's self-harming and consequent hospitalization): "You get on with her so much better than me" (277).

Val's mental disorientation is observed by the other characters around her. She is described by Poppy as "crackers" (252); by Claire as "depressed" (252); by Jean as "unhappy" (277); and by Joyce as "crack[ed] up" (246). In Part One, Scene Eight Val's obvious disorientation is shown by her inability to cope with the stress of motherhood; she is too depressed to play with her children when they are left in her care. Colin is about to go to work when he sees his sons crying; Val sits in a state of distracted hopelessness indicated by the stage directions: "Val, helpless, sits, vaguely stroking their hair" (279). Later, after telling Colin: "I don't want to take responsibility for this relationship any longer" (280) - her husband is at a loss how to deal with Val's suffering; he is well-meaning but ineffectual and emotionally dependent - Val "goes over to the window and smashes her fists and arms through it" (280). Here, her self-destructive action is indicative of a person suffering from inner hysteria. But unlike Mary in "Ripen Our Darkness," who smashes her husband's toy army tank to release her overwhelming anger, Val's intense rage is primarily directed towards herself. Val's inner hysteria may be caused not only by her inability to be a 'normal' mother and wife, but also by her repressed feelings of insecurity in her relationship with her mother. Here it will be useful to return to Nancy Chodorow's theory of feminine oedipal configuration in order to explain Val's mental disintegration. According to Chodorow:

[A] girl's libidinal turning to her father [at the oedipal stage] is not at the expense of, or a substitute for, her attachment to her mother. Nor does a girl give up the internal relationship to her mother which is a product of her earlier development [at the preoedipal stage]. Instead, a girl develops important oedipal attachments to her mother as well as to her father. These attachments, and the way they are internalized, are built upon, and do not replace, her intense and exclusive preoedipal attachment to her mother and its internalized counterpart [the struggle for a sense of separation, identification, dependency, ambivalence]. If there is an absolute component to the change of object, it is at most a concentration on her father of a girl's genital, or erotic, cathexis. But a girl never gives up her mother as an

internal or external love object, even if she does become heterosexual (Chodorow, 1978:127).

What can be inferred from Chodorow's psychoanalytic explanation is that a girl, even at the adult stage or after heterosexual marriage, is still unconsciously attached to her mother and remains in an ambivalent and incomplete heterosexual relationship with a father figure because he is only seen as the erotic object; but emotionally the mother is still the primary love object. Analogously, Val's mental breakdown may be read as resulting from her inability to have a complete emotional relationship with her husband; thus ambivalent feelings of hatred and love towards her mother arise because of her inner difficulty in accepting her separation from her mother (implied but not dramatized in the play). Val's state of mind is fully exposed through her monologue towards the end of Part Two, Scene Five. She recollects:

I think now, that I knew I was getting ill, losing control. I remember when the boys were just babies and we lived in hard-to-let flats with the railway track running behind our block and lifting one of them up to see a train go past - it all seems so insignificant now. He was fascinated and as I held him I started to cry and repeat over and over 'This is a little person'. I felt happy and overwhelmingly sad at the same time. I don't know why and from then on it was like getting drunk. [...] like when you start to get drunk, you relax, tell yourself you can sober up in a minute, only you can't and when confronted with sober people you know you're losing ground, so you appear more drunk, not that you could appear sober if you wanted to anyway (325).

Clearly, her psychological problem, her symptoms of inner hysteria ("getting ill", "losing control", "losing ground") may be seen as reaching a crisis within the early mother-child relationship, as regressive and infantile, leading to psychological immaturity, self-destructiveness and passivity. As a girl child, Val accepts her castrated position, but instead of maintaining an attachment to a father figure (Colin), she prefers the lost preoedipal tie to her mother. Val has not been able to accept her motherhood after having had her twin sons ("I felt happy and overwhelmingly sad at the same time") because she herself has unconsciously failed to see herself as separate from her mother. Being the first born, Val has not overcome her feelings of anger

and jealousy (at the post-oedipal stage) caused by the birth of two younger sisters. Thus, deprived of physical and emotional closeness to her mother, this sense of 'lack' is carried unconsciously into adult life and results in feelings of resentment, yet she craves intense motherly attention and love. It is her desire to re-create the intimate pre-oedipal mother-daughter bond. Val's hatred for her mother and jealousy of her two sisters is seen in clues provided by Daniels. For example, in Part One, Scene Two at the family gathering, Val seems very passive and quiet, and she is the only one who does not give present to her mother for Mother's Day; instead, she ridicules the celebration, saying without apparent emotion: "Hurray, hurray, it's Mother's Day" (244). While both Val and Claire went to university, Val gave up her studies in the "classics" (248) for marriage and children but obviously regrets her decision. To Val, there is nothing to celebrate in being a mother. Earlier, when her mother tells her daughters that she has received a Mother's Day card from Sybil, the youngest, Val becomes irritated and remarks: "Oh Sybil, Sybil, Sybil. What a name to call a child, don't dribble Sybil" (241); and later in Part One, Scene Ten, Val remarks to Claire: "You know, you were always her favourite" (294); such utterances indicate Val's resentment and jealousy of her mother's unequal division of affection between her and her younger sisters. It is apparent that the breakdown of communication between Joyce and Val has its roots in events long past. Val craves maternal love for herself and is bitterly resentful of her own maternal self-sacrifice, of having had to give up her education and career, her ambition and her peace of mind in order to marry and raise a family.

Unlike her relationship with Val, Joyce's relations with Claire are seen as more open and expressive, although initially friction is caused by the fact that Claire has been involved in a lesbian relationship; she left her husband for a woman. If Val suffers inner hysteria through her failure to meet the demands of motherhood within a patriarchal family and her unconscious incapacity to be separate from her mother, Claire, on the other hand, may be seen (in Freud's term) as suffering from a 'masculinity complex'. Val's hysterical illness is uncomprehendingly tolerated by her mother because she is not a threat to the family as an institution, but Claire poses a threat because of her total rejection of

heterosexual relationships. Joyce feels utter abhorrence of Claire's sexual orientation and voices her pain, caused by the implications of her daughter's behaviour for her own life; her judgments are based on the values of the dominant culture which the mother has internalized (Part One, Scene Two):

JOYCE: Honestly. Have you no shame?

CLAIRE: (*slowly*). Will you stop picking on me.

JOYCE: Me? Me? Picking on you? Huh, I like that. It's usually only drunk and insane mothers who are considered unfit for parental control.

CLAIRE: Shut up.

VAL: Stop it. Stop it. Stop it.

JOYCE: There, look now, what you've done now. Look.

CLAIRE: I haven't upset anyone. If anyone's upset anyone...

JOYCE: What about me and my ties with her?

CLAIRE: (*shouts*). Drop it please (249).

Joyce is disgusted by the thought that her own flesh and blood, the person in her family with whom she identifies most closely, is a lesbian. She is shamed by the fact that lesbians as well as "drunk and insane mothers" are considered "unfit" to become parents. Despite this, the lack of inhibition of both Claire and Joyce in forcibly expressing their negative emotions without the fear of losing their connectedness shows not only their anger and disappointment, but also their deeper feelings of closeness and love. However, Joyce's generation's standards and challenges are obviously different from Claire's and there seems at this point to be no possibility of improvement in the mother-daughter relationship since neither of them is able to accept the validity of the other's experience and come to a compromise. In Part One, Scene Nine Joyce shows her distaste for Claire's divorce from Lawrence:

JOYCE: I'll never understand what came over you. He wasn't such a bad bloke. He might have had some weird ideas but then, let's face it, he wasn't the only one.

CLAIRE: (*angrily*). For Christ's sake don't start all that up now! (285).

Here, again, the mother and daughter seem to have nothing in common. Joyce disagrees with Claire's decision to leave her husband especially for a woman, and feels free to criticize her daughter for this although she knows that

Claire cannot bear it. In her eyes, Claire has destroyed her only chance of having a good and normal life.

Besides repeatedly hearing her mother's disapproval of her lesbianism, Claire also has to deal with her ex-husband, Lawrence, who has been humiliated by her leaving him and is unable to accept her for what she is. Lawrence is fighting for custody for their child Poppy; his case is based on Claire's 'abnormal' sexual orientation. He is confident that her lesbianism will be the deciding factor: "The sordid details are going to make you look unfit to have a goldfish bowl in your care"(253). Despite having married again, he later tries, in Part Two, Scene Three, to persuade Claire to go back to him:

CLAIRE. You know Poppy means everything to me. You can keep anything, take anything, but not this, let me keep Poppy.

LAWRENCE. It's up to the courts to decide now.

CLAIRE. (*with quiet dignity*). You can change your mind. Anything else, you can have anything else.

LAWRENCE. Can I have you back?

CLAIRE. Oh, Lawrence. That's impossible.

LAWRENCE. Well, then. Can't you see I have to go through with it?(312)

Daniels is saying that, at an individual level, men are particularly unable to come to terms with rejection when their spouses change their sexual orientation. Heterosexual (patriarchal) marriage is the only way of life that Lawrence is able to accept and glorify, but it is what both Val and Claire are escaping. Lawrence's behaviour may be read as that of the castrating father figure who attempts to break the preoedipal bonding, insisting on the transference of attachment from the mother to the father, thus demanding heterosexuality. But the girl child refuses to renounce her primary object of love, and maintains her attachment to the phallic mother.

Later in Part Two, Scene Three Daniels portrays the surprising change in Joyce's attitude towards her daughter; she arrives after consulting a lesbian solicitor regarding child custody. Initially, Claire is angry with her mother, thinking that she has come to criticize her again, but eventually Joyce manages to make it clear that she has taken steps to help Claire with her custody problem. The solicitor has advised Joyce that both Claire and Poppy should "skip the country"(318) and Joyce suggests they go to the

United States of America. Although Joyce still cannot conceal her distaste for Claire's lesbianism, she will do what she can to prevent Poppy being taken away from her mother. To Daniels, Lawrence's decision to take Poppy is analogous to Persephone's rape by Hades, although Lawrence is supported by the law and has the approval of society. As we have seen, Joyce is fully aware that her daughter's sexual identity will be used to discriminate against her in the matter of the custody of her young child. Joyce says to Claire: "We have our differences - we'll probably have them until the day I die, but I do know this much, if we didn't have them, Lawrence wouldn't be able to use them to get back at you"(319), signifying that she has come to terms with Claire's sexuality and is able to accept her as she is. She also understands society's prejudice against her daughter, that "nobody cares what a good mother you are. All they care about is the other thing"(319) and urges Claire to accept the money she has brought but Claire refuses on the basis that "There are laws that would give them the power to bring us back"(319). Furthermore, Claire is determined to go through the court case to fight for her child in her own way:

CLAIRE: Look, once in court I can take that report apart and show it up for what it is.

JOYCE: (*agreeing*). I'm sure, I'm sure, and who will they believe? A lot rests on these people. No, look, it's taken me long enough to come round and I'm your mother so you're hardly going to persuade some Hooray Henry judge with a broom handle up his backside, to your way of thinking, not in an afternoon anyway.

CLAIRE: No, I won't give in. If there's one thing I've learnt from you it's stand my ground and fight.

JOYCE: And if there's one thing I didn't teach it was to sink. This time you're up to your neck in quicksand and wrenching your own head won't help. You need a hand - somebody else's. Before you say anything, Sybil said that.

CLAIRE: Typical Sybil line that is. It's not what I want.

JOYCE: I don't want it either but it seemed to me that only by letting go of the two of you could any sort of solution be found.

CLAIRE: Thank you, Mum, but I can't (320).

Joyce believes that to fight against a legal system that discriminates against homosexuality is to invite defeat: "only by letting go of the two

of you could any sort of solution be found"(320). However, Claire is determined to go through with the court case to convince the judge and the jurors that she is a capable mother with a good career and able to take care of her daughter like any 'normal' mother. Here, Daniels shows that lesbianism is unacceptable to patriarchal society and its law because it is a threat and a direct challenge to heterosexual family life.

Claire's close relationship with her daughter Poppy is also portrayed in some details by Daniels. Early in the play Claire is seen reading a bedtime story to Poppy, the Demeter-Persephone myth. Later, in Part Two, Scene One she has a heart-to-heart talk with her daughter regarding the struggle for custody. Claire tries to be as truthful as possible with Poppy and encourages her to make her own decision, contrary to Lawrence's accusation that she has "well and truly poisoned her[Poppy's] mind"(311). The fact that Lawrence tries to condemn Claire by calling her "a filthy pike"(301) makes Poppy reconsider their relationship: "I nearly forgot that I loved him"(301). Poppy is determined to stay with her mother because of her feelings of closeness to her, this is shown clearly in the following lines:

CLAIRE: And I left him when you were young and nobody ever asked you what you wanted.

POPPY: Huh, I was only a baby.

CLAIRE: Do you understand why all this happened?

POPPY: (*flatly*). No, I don't.

CLAIRE: (*smiles*). I mean what's happening?

POPPY: Dad is going to court because he wants me to live with him.

CLAIRE: Yes...

POPPY: But I've told everyone that I want to stay with you.

CLAIRE: And that's what I want - more than anything else - but other people are going to decide for us.

POPPY: Why? It's none of their blimbling business.

CLAIRE: Because your Dad won't give in and neither will I.

POPPY: I don't know why they're bothering because I'm staying put. Nobody can make me go.

CLAIRE: What I'm trying to say is that we don't have the power to decide (302).

Here, Daniels illustrates the return to the preoedipal world. Poppy, who has loved her father, now renounces her connection with him completely and returns to her phallic mother, to the mother-daughter dyad exemplified in the Demeter-Persephone myth: "would ever claim her as his own"(239).

Towards the end of the play (Part Two, Scene Five) the outcome of the custody trial is announced to the audience: a "voice off" is heard declaring, "Custody, care and control are awarded to the natural father, Lawrence Anderson"(325), signifying Claire's loss of her daughter. But just after the audience hears of Claire's defeat, the final scene in the play reverses the sad ending: Val, in hospital, is given a note containing a telephone message from New York: "Poppy and Claire have arrived safely and Sybil sends her love"(327) and Joyce comes to take her home. The audience then sees and hears Lawrence, on another part of the stage, pounding on Claire's door and shouting: "For the last time, open this door, Claire"(328). This closing scene implies a happy ending for both daughters. Claire and Poppy have managed to escape from Lawrence, and Joyce and Val are shown leaving hand in hand, signifying that they are willing to reconnect as mother and daughter.

CONCLUSION

In "Neoptide" Daniels offers a positive future to her female protagonists: Val will recover from her 'hysterical condition' and Claire has to flee to the United States of America with her child to escape the custody order; both have been rescued by their mother, Joyce. Like Demeter, Joyce keeps her family together by delivering them from male domination: Val from her unhappy marriage with Colin, and Claire and Poppy from the devious and ruthless Lawrence. Daniels has improvised her version of the myth but as in the original, the daughter has to be temporarily separated from her mother in order to escape the oppressive patriarchal law. By revealing her sexuality Claire not only loses her custody case and her job; she also has to flee to another country in order to keep her daughter. Claire's coming out as a lesbian has entailed suffering and sacrifice. However, it is clear that Joyce has made the right decision to help both her daughters in her own way.

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Peranan Media Internet Arab dalam Meningkatkan Kemahiran Mendengar dan Membaca di Kalangan Pelajar Melayu: Suatu Tinjauan

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Kata kunci: Media internet, laman web, aspek kebahasaan, kemahiran mendengar dan membaca, multimedia

ABSTRAK

Makalah ini bertujuan untuk mengkaji secara deskriptif mengenai maklumat-maklumat jaring bahasa Arab. Ia menyingkap beberapa laman web utama Arab seperti <http://eyoon.fares.net>, <http://www.sendbad.net/>, <http://www.alsaha.com/> dan beberapa laman web utama yang lain. Di sini, penulis akan membandingkan antara laman-laman web utama ini dari pelbagai aspek kebahasaan dan pemerolehan maklumat. Di samping itu, penulis juga akan memfokuskan kepada dua kemahiran bahasa yang dapat dicapai melalui media internet, iaitu kemahiran mendengar dan kemahiran membaca. Kedua-dua kemahiran ini dapat dipertingkatkan melalui penggunaan beberapa laman web yang terpilih seperti <http://www.islampedia.com/>, <http://islamway.com/> dan selainnya. Penulis yakin, kesemua maklumat yang terdapat dalam makalah ini amat penting dalam mengembangkan pemikiran dan pembelajaran serta pengajaran bahasa Arab di negara ini selari dengan perkembangan multimedia di era globalisasi ini.

ABSTRACT

The purpose of this article is the use of websites in Arabic language, mainly "<http://eyenoon.fares.net>, <http://www.sendbad.net/>, <http://www.alsaha.com>". The researcher will compare those websites from the linguistic aspects and the acquisition information. In addition, the researcher will also focus on two languages skills such as listening and reading which can be accessed from the internet media. Browsing the selected websites such as <http://www.islampedia.com/>, <http://islamway.com> can greatly enhance these two skills. The researcher believes that the information gathered from the article will enable readers to develop ideas and knowledge in the study and teaching of the Arabic language in Malaysia, in line with the multimedia development in era globalization.

PENDAHULUAN

Bagi masyarakat Malaysia khususnya orang Melayu, bahasa Arab tidak lagi dianggap sebagai suatu bahasa yang asing dalam kehidupan dan pertuturan harian mereka. Ini kerana bahasa Arab lebih sesuai dikatakan sebagai bahasa kedua atau sekurang-kurangnya diberi kedudukan seperti bahasa kedua, iaitu bahasa Inggeris dan bukannya suatu bahasa yang asing. Asmah Haji Omar (1990: 28) mengatakan bahawa bahasa Arab di Malaysia bukan merupakan bahasa asing, tetapi bahasa sekunder. Beliau mengaitkan pengaruh bahasa Arab dengan pembentukan intelek masyarakat Melayu.

Oleh yang demikian, kemahiran bahasa amat penting dalam pembelajaran dan pengajaran bahasa Arab sebagai bahasa sekunder penutur

Melayu. Menurut pengertian am, seseorang yang mempunyai kemahiran berbahasa mestilah mempunyai kecekapan berbahasa jika dia dapat menggunakan bahasa yang berkenaan itu dengan baik menurut nahu yang betul seperti pembentukan ayat, pembentukan kata, pemakaian awalan dan akhiran dan sebagainya (Asmah Haji Omar 1984:57).

Terdapat pelbagai cara bagi meningkatkan tahap penguasaan bahasa Arab di kalangan pelajar. Antara cara lain yang dicadangkan oleh penulis bagi meningkatkan penguasaan kemahiran ini adalah dengan menggunakan media Internet. Ini kerana penulis mendapati dunia Arab cukup maju dalam bidang teknologi maklumat (IT) dengan pelbagai informasi pengajaran dan pembelajaran bahasa Arab yang

amat menarik dan berkesan. Ini ditambah lagi dengan era globalisasi yang amat mencabar yang mengajak manusia bersaing antara satu sama lain.

Dalam makalah ini, penulis akan membahaskan mengenai laman-laman web utama Arab dengan menjelaskan beberapa kelebihan dan kesesuaian laman-laman tersebut dari sudut penguasaan kemahiran bahasa Arab. Di samping itu, penulis juga akan membahagikan kemahiran bahasa yang boleh dikuasai melalui penguasaan media internet ini kepada kemahiran mendengar dan membaca. Melalui kemahiran-kemahiran yang dicadangkan ini, maka ia sedikit sebanyak akan membantu penutur Melayu untuk mempelajari bahasa Arab dengan lebih berkesan dan efektif.

DEFINISI INTERNET

Menurut Ensiklopedia Wikipedia "The **Internet** is the publicly available worldwide system of interconnected computer networks that transmit data by packet switching over the Internet Protocol (IP). It is made up of thousands of other, smaller business, academic, and government networks that provide various information and services, such as by electronic mail, online chat, and on the graphical, interlinked World Wide Web" (<http://en.wikipedia.org/wiki/>).

Menurut Encarta® World English Dictionary, North American Edition, internet adalah "a network that links computer networks all over the world by satellite and telephone, connecting users with service networks such as e-mail and the World Wide Web" (<http://encarta.msn.com/encnet/features/dictionary>).

Penulis Brooke Broadbent dalam bukunya yang berjudul *Using the Internet Smarter and Faster* mendefinisikan internet sebagai "the internet is a massive worldwide network of interconnected computers, loosely governed internationally. The word 'Internet' means a 'network of networks' or thousand of smaller networks scattered throughout the globe. 'Internet' is also used to mean the service offered. These include the classic services of e-mail, newsgroups, and chat, as well as the more recent browsing service provided by the World Wide Web. Net is normally a short form for Internet. It also refers to both the Internet and intranets".

Daripada ketiga-tiga definisi yang diberikan, penulis mendapati internet sebagai penghubung kepada manusia sejagat bahkan juga mencakupi

pelbagai informasi yang dapat memberi manfaat kepada seluruh manusia. Selain itu, internet juga merupakan kumpulan atau jaringan dari jaringan komputer yang ada di seluruh dunia. Dalam hal ini, komputer yang dahulunya *standalone* dapat berhubungan secara langsung dengan host-host atau komputer-komputer yang lain, malah internet juga sebagai suatu rangkaian antarabangsa yang merangkaikan beribu-ribu sistem komputer sama ada di rumah, pejabat, organisasi atau institusi dengan menggunakan bahasa yang sama. Setiap rangkaian yang disambung ke internet itu boleh dipecahkan kepada rangkaian yang lebih kecil.

LAMAN-LAMAN WEB UTAMA ARAB

Sepanjang penelitian penulis sebagai pengguna Internet, penulis mendapati laman-laman web Arab yang terdapat di internet amat berkesan digunakan untuk membantu penguasaan penutur Melayu berbahasa Arab. Ini kerana laman-laman web ini menyajikan pelbagai maklumat dan informasi terdahulu, terkini dan akan datang mengenai dunia Arab dan antarabangsa serta pelbagai bidang pengajian Arab dan agama Islam. Ini termasuklah bidang pengajian bahasa Arab, sains, ekonomi, politik, komputer, multimedia dan sebagainya.

Antara laman-laman web utama Arab yang memberikan informasi terkini adalah seperti <http://www.raddadi.com/>, <http://eyoon.fares.net/>, <http://www.sendbad.net/>, <http://www.alsaha.com/> dan selainnya. Laman-laman web ini menyamai enjin pencarian (search engine) utama yang lain seperti Yahoo, MSN, Search, Altavista, Snap dan sebagainya.

Jika dilihat dalam laman web <http://www.raddadi.com/> sebagai contoh, penulis mendapati terdapat pelbagai bidang kehidupan yang disediakan bagi tatapan pengguna. Antara bidang-bidang pencarian yang diberikan adalah seperti berikut:

- Laman web kesihatan
- Laman web Islam
- Laman web media massa
- Laman web kerajaan
- Laman web pekerjaan
- Laman web sukan
- Laman web komputer dan sebagainya.

Selain itu, laman web ini juga membolehkan pengguna menghantar emel, *berchit chat*, berforum dan membuat sebarang komentar.

Manakala laman web <http://www.alsaha.com/> pula lebih menarik. Ini kerana ia bukan sahaja mengandungi laman web kesihatan, Islam, media massa atau sebagainya, bahkan ia juga menyajikan pelbagai bidang lain seperti pendidikan,

pelancongan, siaran radio dan tv. Di samping itu, laman ini juga mengandungi laman-laman web yang terdapat di setiap negara Arab seperti Mesir, Libya, Saudi Arabia, Tunisia, Kuwait dan lainnya.



<http://www.roddadi.com/>



<http://www.alsaha.com/>

PENGUASAAN KEMAHIRAN BAHASA ARAB MELALUI INTERNET

Dalam makalah ini, penulis akan membentangkan penguasaan kemahiran bahasa Arab yang mudah diperoleh dan praktikal melalui media internet kepada dua penguasaan yang berikut:

- i. Penguasaan Kemahiran Mendengar
- ii. Penguasaan Kemahiran Membaca

Penguasaan Kemahiran Mendengar Melalui Internet

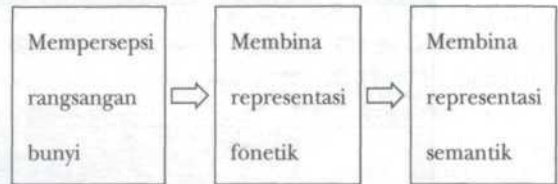
Mendengar merupakan satu daripada unsur komunikasi yang tertua, terpenting, dan paling kerap digunakan. Mendengar dan bercakap perlu lebih dahulu diutamakan berbanding membaca dan menulis. Prinsip ini menjadi asas yang penting dalam pengajaran bahasa yang mengutamakan pendekatan kemahiran mendengar (Asmah Hj. Omar 1984:74).

Namun, sebagai satu kemahiran dalam pembelajaran bahasa, mendengar merupakan bahagian yang paling kerap diabaikan. Mendengar merupakan kemahiran asas berbahasa yang paling awal muncul berbanding kemahiran bahasa yang lain. Dari segi urutannya dapat dikatakan bahawa kanak-kanak akan mendengar lebih dahulu daripada bertutur, bertutur lebih dahulu daripada membaca, dan membaca lebih dahulu daripada menulis.

Kemahiran asas berbahasa seperti mendengar, bertutur, membaca, dan menulis dapat dibahagikan kepada dua jenis kemahiran komunikasi. Kemahiran mendengar dan membaca dianggap sebagai kemahiran menerima komunikasi, dan kemahiran bertutur dan menulis pula dianggap sebagai kemahiran menyampaikan komunikasi. Kemahiran mendengar dan bertutur menggunakan media lisan, sementara kemahiran menulis dan membaca menggunakan media tulisan. Salah satu unsur yang perlu ditekankan setelah mendengar sesuatu bunyi atau sebagainya adalah unsur pemahaman. Ortegay (1959:1) mengatakan bahawa hanya dengan usaha yang gigih, kita mampu memahami beberapa bahagian penting daripada apa yang cuba disampaikan atau difahamkan oleh sesebuah teks.

Selain itu, proses pemahaman juga merupakan proses mental untuk memahami sesuatu wacana lisan. Pendengar perlu mempersepsi dan memproses bunyi-bunyi yang dipertuturkan oleh penutur dan menggunakan hasil pemprosesan itu untuk mentafsir apa yang cuba disampaikan oleh penutur. Dengan kata lain, pendengar perlu

membina representasi fonologi daripada bunyi-bunyi yang didengar dan kemudiannya melakukan beberapa tindakan untuk menukar representasi fonologi ini kepada representasi semantik (Zulkifley Hamid 1994:45). Proses yang berlaku dapat digambarkan dalam *Rajah 1* berikut:



Rajah 1: Representasi fonologi kepada representasi semantik

Melalui penguasaan internet hari ini, penulis merasakan kemahiran mendengar dan pemahaman sesuatu wacana atau teks dapat diterapkan dalam penguasaan bahasa Arab. Ini kerana melalui laman-laman web yang tertentu, kita dapat mendengar perbualan, pembacaan berita dan muzik Arab yang akan menguatkan penguasaan pelajar terhadap kemahiran bahasa Arab.

Terdapat banyak laman-laman web Arab yang menyajikan siaran radio dan TV Arab sama ada secara langsung (بث مباشر) mahupun secara rakaman (بث مسجل). Antaranya seperti berikut:

i. Laman Web Radio Arab

<http://www.un.org/arabic/av/radio/news/dailynews.htm>

Laman web ini merupakan berita United Nation dalam bahasa Arab. Ia menyajikan pelbagai berita setiap hari. Sesuatu yang amat menarik di sini pengguna boleh mendengar berita-berita yang disiarkan pada bulan-bulan yang lalu dari Januari 2002 hingga ke hari ini. Selain itu, antara kelebihan laman ini adalah setiap berita yang dibaca oleh pembaca berita dituliskan teksnya. Ini akan memudahkan lagi proses penguasaan kemahiran berbahasa Arab, kerana di samping pengguna mendengar siaran berita, pengguna juga boleh membaca teksnya dalam satu masa.

ii. Laman Web Televisyen Arab

<http://www.samd.8m.com/tv.htm>

Melalui laman web ini, pengguna dapat memilih lebih daripada 10 siaran TV untuk ditonton. Antaranya:

- TV Arab Amerika
- TV Mesir
- TV Bahrain
- TV Lubnan
- TV Qatar
- TV Kuwait
- TV Dubai
- TV Jordan
- dan lain-lain lagi

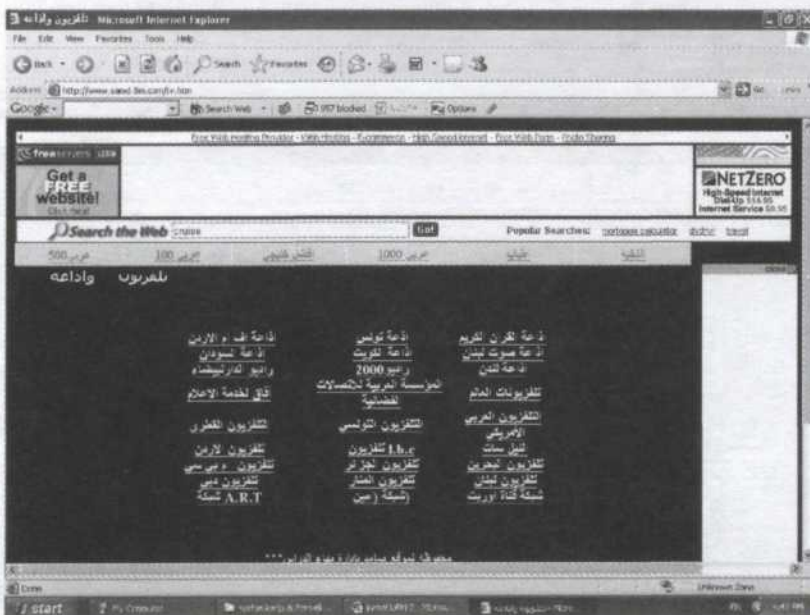
iii. Laman Web Video Arab

<http://www.islampedia.com/>

Melalui laman ini, pendengar dapat mendengar dan melihat pelbagai tajuk yang berkaitan dengan sains seperti astronomi, biologi dan lainnya. Terdapat pelbagai tajuk yang amat menarik yang dapat didengar bagi penguasaan kemahiran mendengar. Antara tajuk-tajuk yang diberikan adalah seperti berikut:



<http://www.un.org/arabic/av/radio/news/dailynews.htm>



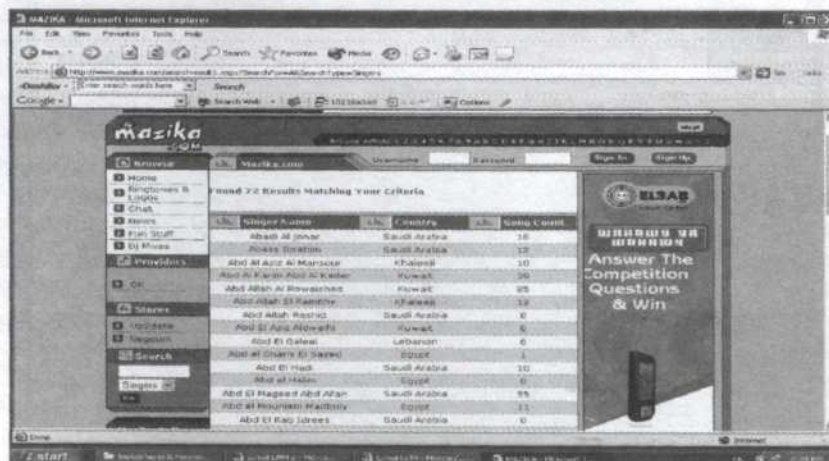
<http://www.samd.8m.com/tv.htm>

- Penciptaan Alam
- Keluasan Alam
- Pergerakan matahari
- Pergerakan bulan
- Pusingan bumi
- Kejadian angin
- Kejadian laut
- Kejadian manusia
- Kesakitan yang dialami oleh manusia
- Bahaya pemakanan yang tidak sihat
- Bahaya pemakanan daging khinzir
- Dan lainnya

iv. Laman Web Lagu-Lagu Arab

Antara laman web lagu yang paling popular dalam bahasa Arab adalah <http://www.mazika.com/> yang terdapat dua pilihan bahasa, iaitu bahasa Arab dan Bahasa Inggeris.

Melalui laman web ini, kita dapat mendengar dan menyimpannya ke dalam cakera keras lagu-lagu dan penyanyi-penyanyi dari pelbagai negara Timur Tengah. Suatu yang menarik di sini adalah pengguna hanya perlu memilih abjad A-Z bagi mencari nama seseorang penyanyi. Bagi abjad (A) sahaja terdapat 72 orang penyanyi yang diberikan seperti dalam laman web yang kedua di bawah:



<http://www.mazika.com/>

v. Laman Web Audio Al-Quran dan Nasyid Arab Kebanyakan penutur Melayu apabila ia bertutur dalam bahasa Arab, intonasi yang diujarkan itu tidaklah seperti orang Arab. Antara penguasaan yang perlu ditekankan oleh penutur Melayu untuk fasih berbahasa Arab adalah mendengar pembacaan Al-Quran daripada pelbagai *qari'*. Antara laman web yang menyajikan pembacaan al-Quran ini adalah seperti <http://islamway.com/>.

Laman web ini merupakan antara yang terbesar yang menyumbangkan audio pembacaan al-Quran. Terdapat lebih daripada 150 orang *qari'* yang dapat didengar pembacaan mereka secara percuma. Selain dari bahasa Arab, laman web ini juga menyajikan pengguna kepada empat bahasa yang lain, iaitu Inggeris, Perancis, Belanda dan juga Urdu. Pengguna dapat mengklik ikon al-Quran dan antara *qari'* yang terdapat dalam laman web ini.

Di sini juga pembaca dapat mendengar nasyid berbahasa Arab yang diberikan secara percuma. Terdapat lebih daripada 50 kumpulan nasyid yang diberikan, antaranya adalah seperti yang tertera di kolom sebelah.

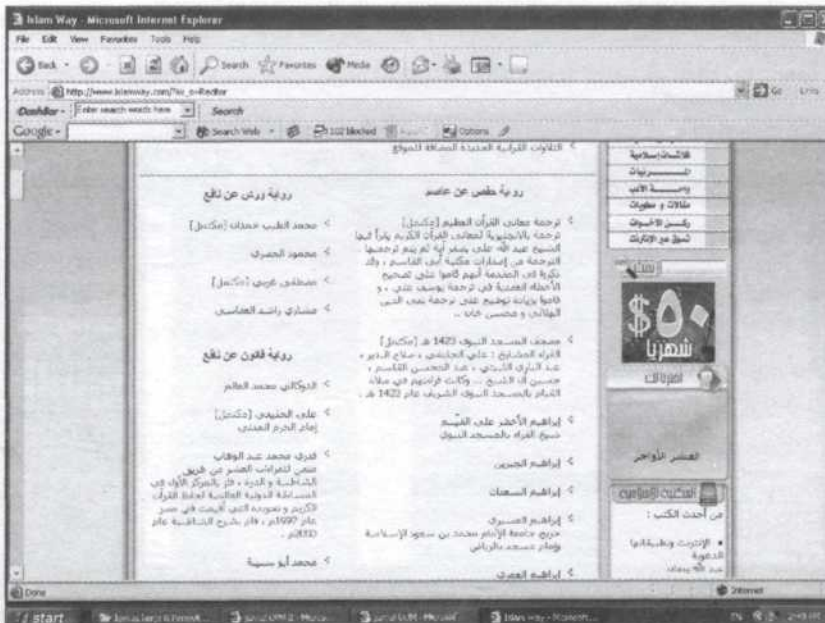
Penguasaan Kemahiran Membaca Melalui Internet
Kemahiran membaca merupakan salah satu kemahiran yang penting di peringkat pembelajaran bahasa sama ada peringkat sekolah rendah mahupun sekolah menengah. Ia menjadi

- | | |
|---------------------|-----------------|
| • رباح النصر | • صدى الإيمان |
| • الإتحاد | • الإعصار |
| • النفير | • الشموخ |
| • أين الملوك ؟ | • عبرات بوسنوية |
| • ورموك يا رامي | • البشارة |
| • الحج المبرور | • الصارخ |
| • ديننا | • جيل العزة |
| • أمي الحبيبة | • جراح سراييفو |
| • الحان نازفة | • الدمام 2 |
| • كل الوفاء الى أمي | • هداة البشر |
| • قادمون | • البراق |

semakin penting apabila seseorang pelajar itu melanjutkan pengajiannya ke peringkat yang lebih tinggi seperti kolej, institusi atau universiti.

Membaca membawa pelbagai pengertian kepada aktiviti berfikir. Proses membaca tidak akan tercapai dengan sepenuhnya sekiranya pembacaan berikut tidak disertai dengan konsep pemahaman. Mengikuti Robert Lado (1980:3), beliau menjelaskan membaca itu bermaksud menyingkap pola-pola bahasa daripada bentuk tulisannya.

Smith pula berpandangan bahawa membaca adalah proses psikolinguistik yang berlaku apabila seseorang membentuk semula di dalam



<http://islamway.com/>

pemikirannya (dengan sebaik mungkin) erti atau maksud yang telah diterbitkan oleh seseorang penulis dalam bentuk tulisan yang kemudiannya dibaca oleh si pembaca tadi (Mangantar Simanjuntak 1995: 24).

Manakala Atan Long (1978: 34) pula menghuraikan proses membaca sebagai proses yang melibatkan kebolehan mengenal lambang-lambang dan menterjemah lambang-lambang itu semua kepada bunyi suara (bahasa) serta memahami makna atau tanggapan yang disampaikan oleh tulisan itu.

Oleh yang demikian, membaca melibatkan proses deria dan minda. Kedua-dua proses ini adalah saling berhubungan di antara satu sama lain. Proses bacaan yang melibatkan organ deria seperti mata dan telinga adalah kurang berkesan berbanding proses minda. Pembacaan melalui minda amat berkesan kerana ia melibatkan otak yang bertindak memproses sesuatu bahan bacaan yang dibaca dan proses ini dilakukan berterusan. Sebenarnya, aktiviti membaca adalah proses yang kompleks yang melibatkan komunikasi di antara pembaca dengan penulis melalui sumber tulisannya. Ia juga melibatkan tahap pemikiran kognitif yang tinggi.

Melalui penguasaan internet, penutur Melayu yang mempelajari bahasa Arab dapat menguasai kemahiran membaca teks Arab melalui laman-laman web yang berikut:

i. Buku-Buku Arab

<http://www.alwaraq.com/>

Melalui laman web ini, pengguna dapat merujuk pelbagai buku-buku Arab dalam pelbagai bidang. Ia dibahagikan kepada dua, iaitu pertama buku-buku *al-Turath* dan kedua buku-buku *al-muhaqqaq*.

Bagi buku-buku *al-turath* terdapat lebih daripada 30 bidang pengajian yang diberikan, manakala buku-buku *al-muhaqqaq* pula terdapat lima bidang sahaja yang melibatkan 70 buah buku sahaja. Suatu yang perlu diketahui di sini, pengguna perlu mendaftar sebagai ahli sebelum membaca buku-buku yang disediakan.

ii. Akhbar-Akhbar Arab

<http://www.onlinenewspapers.com/>

Melalui laman web ini, pengguna dapat merujuk pelbagai akhbar dari seluruh dunia. Pencariannya dibahagikan kepada dua, iaitu pencarian mengikut benua seperti Amerika, Eropah; Asia, Asia Barat dan sebagainya. Manakala pencarian yang kedua pula mengikut abjad dari A-Z.

Bagi akhbar Negara Timur Tengah pula, terdapat 15 buah negara seperti Lubnan, Syria, Qatar, Bahrain dan selainnya. Sebagai contoh, antara akhbar yang diterbitkan di Lubnan adalah seperti berikut:

- Addiyar Online (Beirut)
- Al-Aman (Beirut)
- Al-'Anwar
- Al-Balad



<http://www.alwaraq.com/>

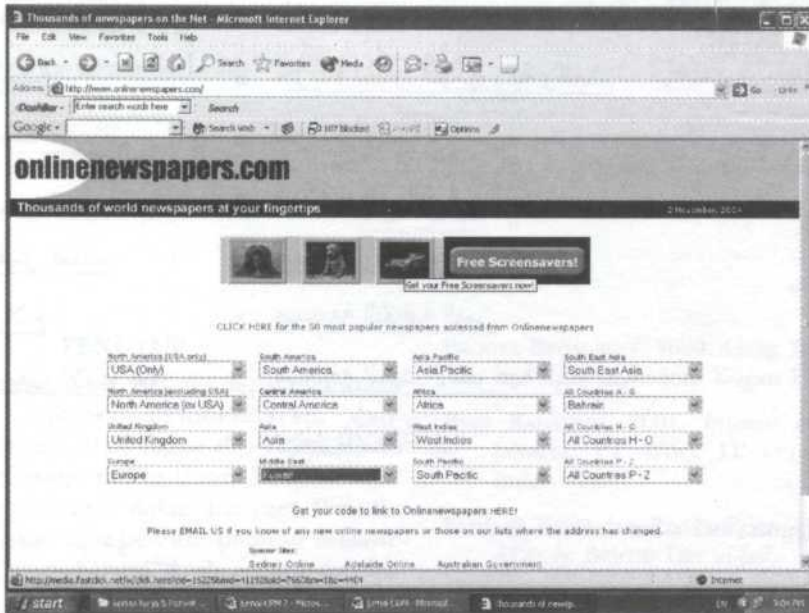
- Al-Hawadeth
- Al-Hayat
- Al-Intiqad
- Al-Liwa
- Al-Ousbou' Al-'Arabi
- Al-Syarq
- Al-Siiraa
- Al-Watan Al-'Arabi

- Al-Intiqad
- Al-Mustaqbal
- Al-Nabaa

iii. Majalah-Majalah Arab

<http://eyoon.fares.net/425/>

Melalui laman web ini, pengguna dapat membaca majalah-majalah dari timur tengah. Ia dibahagikan kepada 4 majalah yang berikut:



<http://www.onlinenewspapers.com/>



<http://eyoon.com/>

a. Majalah mingguan berbahasa Arab

مواقع صحافة و إعلام: إسبوعية عربية

مجلة فراس تون للأطفال	::	مجلة الشهيد
الأزمة العربية	::	مجلة فواصل الجزائرية
الأهالي	::	المغترب العربي
الشورى نت	::	الاهالي جريدة تحترم الناس
جريدة أخبار الجمهورية والعالم	::	اصوات الشمال
جريدة الوحدة - تونس	::	جريدة الشاهد المستقل
شبكة نوادر التراث الشعبي	::	جريدة نون
صحيفة الأسبوعية الموبوءة	::	صحيفة أخبار النقب
صحيفة الثقافية اليمن	::	صحيفة البلاغ
صحيفة العهد الاسبوعية البحرينية	::	صحيفة السبيل الأسبوعية
مجلة 26 سبتمبر	::	قاسيون

b. Majalah mingguan berbahasa selain Arab.

مواقع صحافة و إعلام: إسبوعية لغات أخرى

صحيفة الهدى	::	جريدة السفير العربي
Al Ahran Weekly	::	ميدل ايست تايمز
Beirut Times	::	Arab Voice

c. Majalah bulanan berbahasa Arab

مواقع صحافة و إعلام: شهرية عربية

مجلة مخايل الالكترونية	::	مانشيت - Manshet- Egypty.com
مجلة السياحة الاسلامية	::	اجيبتي
مجلة النعمة	::	مجلة الحضارة
مجلة هو وهي للشباب	::	مجلة الغرباء الالكترونية
موقع مجلة العرب	::	مجلة النعمة
الحياة	::	مجلة ود
نشرة النخبة الإدارية	::	موقع جريدة التجديد المغربية
	::	الوحدة

مجلة أنهار	::	مجلة حماة الوطن العسكرية
مجلة حطة	::	مجلة قيصر
المشرق الاعلامي	::	نار ونور

d. Majalah bulanan selain berbahasa Arab.

صحافة و إعلام: شهرية بلغات أخرى

مرايا مجلة اجتماعية ثقافية	::	موقع مجلة أو غاريت للحوار بين الثقافات
الاسلام اليوم - البشير للأخبار	::	مجلة الأعمال
مجلة بي سي	::	مصر اليوم
السفير العربي	::	هاي تيك

PENUTUP

Daripada penulisan tadi, penulis dapat membuat kesimpulan bahawa pembelajaran dan pengajaran bahasa Arab dapat dipertingkatkan melalui penguasaan penggunaan laman-laman web Arab yang terdapat dalam internet. Penulis juga menyarankan agar penutur-penutur Melayu yang mempelajari bahasa Arab secara formal atau secara tidak formal dapat menjadikan internet sebagai alat bantuan pemerolehan kemahiran dan penguasaan bahasa Arab yang berkesan. Malah, pengajar-pengajar bahasa Arab sama ada di sekolah mahupun di Institusi Pengajian Tinggi (IPT) dapat menggalakkan pelajar-pelajarnya melayari laman-laman web Arab sebagai suatu pendedahan yang amat berfaedah dalam pengajaran dan pembelajaran bahasa Arab di Malaysia.

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Relationships Among Output, Wages, Productivity and Employment in the Malaysian Electronic and Electrical Sub-sector

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Keywords: Output, wages, productivity, electronic and electrical industries, employment

ABSTRAK

Industri elektrik dan elektronik Malaysia telah menjadi komponen paling penting dalam sektor pembuatan negara. Seperti yang diketahui umum, sektor tersebut memainkan peranan penting dalam eksport negara, guna tenaga sepertimana pertumbuhan ekonomi. Memikirkan kepentingan subsektor tersebut, adalah mustahak supaya kita memastikan pertumbuhan subsektor itu berterusan dan persaingan dikekalkan atau dipertingkatkan. Kajian ini secara khususnya bertujuan untuk menyelidik pertalian antara output, produktiviti, gaji dan buruh. Seperti yang diketahui umum, gaji boleh meningkat selagi ia setara dengan peningkatan tinggi dalam produktiviti. Walau bagaimanapun, perubahan gaji sebenarnya boleh mempengaruhi guna tenaga. Ujian punca unit menunjukkan bahawa semua pemboleh ubah gaji tersebut adalah I (1). Prosedur Johansen dikendalikan untuk melihat hubungan jangka panjang dan jangka pendek dengan pemboleh ubah tersebut. Keputusan ujian kointegrasi Johansen menampakkan bahawa hubungan jangka panjang keseimbangan wujud di kalangan pemboleh ubah tersebut. Daripada analisis dinamik jangka pendek, kami dapati bahawa kecuali gaji sebenar, produktiviti buruh dan guna tenaga secara statistiknya signifikan dalam mempengaruhi output.

ABSTRACT

The Malaysian electronic and electrical sub-sector has been the most important component of the nation's manufacturing sector. As is widely known, the sector has played a vital role in the nation's export, employment as well as overall economic growth. Considering the importance of the sub-sector, it is imperative that we ensure sustainable growth of the sub-sector and that competitiveness is maintained or even improved. This study is particularly aimed at investigating the linkages between output, productivity, wage and labour. As is widely acknowledged, wages may increase as long as it is commensurate with a higher increase in productivity. However, changes in wages can actually affect employment. Unit root tests indicate that all of the above variables are I(1). Johansen's procedure was conducted to see the long run and short run relationships between the variables. The Johansen cointegration test results revealed that a long-run equilibrium relationship exists among the variables. From the short run dynamic analysis, we found that except for real wages, labour productivity and employment are statistically significant in influencing output.

INTRODUCTION

Since the early 1980s, the Malaysian economy has relied heavily on the manufacturing sector. About 27% of the working population is engaged

in the sector (Table 1). The manufacturing sector is currently the major contributor to the nation's GDP (about 30% of the total) and it accounts for about more than 80% of the nation's total merchandise export.

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TABLE 1
 Malaysian manufacturing sector: annual growth of output, exports, value added,
 percentage share of GDP and employment

Year	Output Growth	Exports Growth	Percentage Share of GDP	Percentage Share of Employment
1988	17.0	31.97	21.1	15.29
1989	20.3	36.21	23.3	15.94
1990	15.3	28.07	24.6	19.94
1991	14.0	30.91	25.6	21.33
1992	7.0	16.53	25.1	23.10
1993	14.6	25.52	26.2	23.55
1994	11.4	34.11	26.7	24.89
1995	11.4	22.41	27.1	25.92
1996	18.2	7.66	29.1	26.68
1997	10.1	12.87	29.9	27.50
1998	-13.4	32.80	27.9	26.50
1999	13.5	14.34	30.	27.10
2000	17.0	20.61	33.4	27.6
2001	12.0	24.9	30.2	26.7
2002	4.0	29.3	30.1	21.7
2003	6.5	26.6	30.6	21.7

Source: Malaysia Economic Report

Within the manufacturing sector, the electronic and electrical (E&E) sub-sector has played a leading role in the nation's growth, exports and employment. In 2003, the sub-sector contributed 61% of the total manufacturing output, about 35% of the total manufacturing value added, and accounted for 34% of total manufacturing employment. The E&E sub-sector also contributed 68% (worth of RM223 billion) of the total manufactured exports in year 2003. Major export products include electrical machinery, apparatus, appliances, electrical parts, office machines and automatic data processing equipment. In terms of value added, much of it has been contributed by semiconductors and other electronic components and communication equipment and apparatus, radio and TV sets, sound reproducing, and reproducing and recording equipment.

Obviously, the country's exports are heavily dependent on manufactured products while manufactured exports are narrowly based on E&E products. Thus, our exports would be very sensitive and vulnerable to changes in world supply and demand for electrical products. Should there be any severe drop in the demand for electronic and electrical products in the world market, the country's economy would be adversely affected in terms of growth and employment. The world electronic industry did

experience severe doldrums in the middle of the 1980s in the aftermath of a massive supply expansion in anticipation of increased demand which did not materialise. The effects of the doldrums were severely felt by many producers, exporters and workers in the electronic sector. As such, it is important to understand the relationship or interdependence between certain important variables in the sub-sector i.e. output, productivity, employment and wage.

A very first question here is whether wage, labour productivity and employment significantly affect the real output of the Malaysian electronic sub-sector? It is also of interest to examine the multi-directional linkages among the real output, wages, productivity growth and employment in the electronic sub-sector. The establishment of causal dynamic linkages among these variables has important implication for Malaysia. If the wage rate leads to a higher productivity, then increasing it can increase the manufacturing output and competitiveness in the international market. However, if the increase in wage rate leads to a significant reduction in employment, then the objective of reducing unemployment may contradict that of reducing poverty and improving the living standards of the workers.

Numerous studies have been conducted to examine the relationship among wages, productivity, employment and output. Huh and

Trehan (1995) found that Granger causality runs from prices and productivity to wages but not the other way round in the United States by using a simple dynamic labour demand model. Parker (1995) had shown that increase in the United States wage rate increased the labour productivity, but it reduced the level of employment by about 2%. Hostland (1996) supported the neoclassical view of a long run equilibrium relationship between the real wage rate and labour productivity in the case of Canada. Deviations between the real producer wage rate and average labour productivity are large and persistent but are not found to be permanent. Growth in the real producer wage rate in excess of average labour productivity has generally had relatively minor implications on the employment rate.

The effect of productivity growth on wages has been carried out by Carneiro (1998) in Brazil using time series data for 22 manufacturing sub-sectors for 1985-1993. He found changes in sectoral productivity to be a relevant explanation for the changes in sectoral nominal wages. Paus and Robinson (1997) demonstrated that economic growth, investment share growth and productivity growth are the determinants of real wage growth. They also concluded that governments who want to promote growth and living standards of their workers have to focus explicitly and primarily on increasing investment and productivity growth. On the other hand, Pehkonen (1995) found that there are considerable differences across the different sectors of the economy and inter-country differences of productivity growth.

This paper is divided into several parts. The next section explains the sources of data and the econometric methodology employed followed by discussion on the estimated results. The last section provides the conclusion and policy implication.

THE DATA AND METHODOLOGY

The Data

This study involves annual data spanning from 1973 to 1997 of the E & E sub-sector real output (RO), employment (EMP), labour productivity (LP) and real wages (W). They were collected from various issues of the Malaysia Year Book of Statistics, published by Department of Statistics and Annual Productivity Report by National Productivity Corporation (NPC).

Value-added is used as a proxy for output of E&E sub-sector. The value added output is gross ex-establishment values minus cost of inputs and is deflated by the producer price index (PPI) to achieve real terms at the base year 1990. Value-added reflects the true economic activity of the industry and it also tended to yield results that are more closely associated with business changes. The nominal wages is derived by dividing the labour costs (salaries and wages paid, including bonuses, cash allowances, etc) by the number of paid employees. The real wage is then obtained by deflating the nominal wage with consumer price index (CPI). The number of paid employees comprises both full time and part-time workers, where two part-time workers are made equivalent to one full-time worker. Labour productivity (LP) is defined as value added per employee in nominal terms.

Vector Autoregressive (VAR) Model

For the purpose of this study, a vector autoregressive (VAR) model was set up to investigate the relationship among output, labour productivity, employment and real wages in the E&E sub-sector.

$$\begin{bmatrix} RO_t \\ LP_t \\ EM_t \\ W_t \end{bmatrix} = \begin{bmatrix} \alpha_1 \\ \alpha_2 \\ \alpha_3 \\ \alpha_4 \end{bmatrix} + \begin{bmatrix} \beta_{1,1}(L) & \dots & \beta_{1,4}(L) \\ \vdots & \dots & \dots \\ \vdots & \dots & \dots \\ \beta_{4,1}(L) & \dots & \beta_{4,4}(L) \end{bmatrix} \begin{bmatrix} RO_t \\ LP_t \\ EM_t \\ W_t \end{bmatrix} + \begin{bmatrix} \varepsilon_1 \\ \varepsilon_2 \\ \varepsilon_3 \\ \varepsilon_4 \end{bmatrix} \quad (1)$$

where RO denotes the real output; LP is labour productivity; EM is employment and W is real wages.

The long-run relationships amongst the variables are investigated by the Johansen-Juselius (1990) multivariate cointegration test. The short-run relationships, on the other hand, are analyzed by the Granger-causality analysis with the vector error-correction model (VECM) (1988).

Multivariate Cointegration Test

Before conducting the multivariate cointegration test, it is necessary to establish whether the relevant variables are stationary and to determine the order of integration of the variables. This can be achieved by employing unit root tests, namely the Augmented Dickey-Fuller (ADF) (1979) and unit root tests in the levels and first

differences of the variables. After having the order of integration of each series or stationary properties of each individual series, maximum likelihood multivariate cointegration test is then utilized to determine the number of linearly independent cointegrating vectors in the system. In the case of non-stationary data, a cointegration analysis will then be conducted in a vector autoregression (VAR) model.¹

$$\Delta X_t = \Pi X_{t-1} + \sum_{i=1}^{k-1} \Gamma_i \Delta X_{t-i} + \mu + \Theta t + \varepsilon_t \quad (2)$$

where $\Pi = -\left(I - \sum_{i=1}^k \Pi_i \right)$ and $\Gamma_i = -\left(I - \sum_{j=1}^i \Pi_j \right)$,

for $i = 1, \dots, k - 1$.

X_t is a vector of p variables (or $p = 4$ for this study), μ are the intercepts, t are deterministic trends and ε_t is a vector of Gaussian random variables. The coefficient matrix Π , also referred to as the long-run impact matrix, contains information about the stationarity of the four variables and the long-run relationship amongst them. The rank (r) of the matrix determines the number of cointegrating vectors in the system. In the absence of cointegration, Π is a singular matrix (its rank, $r = 0$). Hence, in a cointegrated case, the rank of Π could be anywhere between zero and four. If $r = 1$, there is a single cointegrating vector, whereas for $1 < r < 4$, there are multiple cointegrating vectors. This is an indication that the variables in the system are cointegrated in the long run with r cointegrating vectors. In other words, these variables possess a long-run equilibrium relationship, and are moving together in the long run. The Π matrix can be factored as, $\Pi = \alpha\beta'$, where the α matrix contains the adjustment coefficients and the matrix contains the cointegrating vectors. (Johansen and Juselius 1990) approach uses two likelihood ratio statistics, the trace and the maximum eigenvalue statistics, to test for the possible number of cointegrating vectors in the system. Critical values for these statistics are

tabulated in Osterwald-Lenum (1992). The optimal lag structure of the system is determined by using the Likelihood ratio test.

Vector Error-Correction Model (VECM)

If cointegration is detected amongst the variables, then the short-run Granger-causality analysis on these variables must be conducted in a vector error-correction model (VECM) to avoid problem of misspecification (see Granger 1988).² Otherwise, the analysis may be conducted as a standard vector autoregressive (VAR) model.³ The direction of Granger-causal effect running from one variable to another can be detected using the vector error-correction model (VECM) derived from the long-run cointegrating vectors. The VECM model employed for the testing of Granger-causality across various variables in the system can be represented by:

$$X_t = \begin{pmatrix} \Delta RO_t \\ \Delta LP_t \\ \Delta EM_t \\ \Delta W_t \end{pmatrix} = \begin{pmatrix} \alpha_1 \\ \alpha_2 \\ \alpha_3 \\ \alpha_4 \end{pmatrix} + \begin{pmatrix} \beta_{11}(L) & \beta_{12}(L) & \dots & \beta_{14}(L) \\ \beta_{21}(L) & \beta_{22}(L) & \dots & \beta_{24}(L) \\ \vdots & \vdots & \ddots & \vdots \\ \beta_{41}(L) & \beta_{42}(L) & \dots & \beta_{44}(L) \end{pmatrix} \begin{pmatrix} \Delta RO_t \\ \Delta LP_t \\ \Delta EM_t \\ \Delta W_t \end{pmatrix} + \begin{pmatrix} \gamma_1 z_{1,t-1} \\ \gamma_2 z_{2,t-1} \\ \vdots \\ \gamma_4 z_{4,t-1} \end{pmatrix} + \begin{pmatrix} \Phi(L) & 0 & \dots & 0 \\ 0 & \Phi(L) & 0 & \dots & 0 \\ \vdots & \vdots & \vdots & \vdots & \vdots \\ 0 & \dots & 0 & \Phi(L) \end{pmatrix} \begin{pmatrix} \varepsilon_{1,t} \\ \varepsilon_{2,t} \\ \vdots \\ \varepsilon_{4,t} \end{pmatrix} \quad (3)$$

where X_t is an (4×1) vector of the variables in the system, α 's represent a vector of constant terms, β 's are estimable parameters, Δ is a difference operator, L is a lag operator, $\beta(L)$ and $\Phi(L)$ are finite polynomials in the lag operator, z_{i-1} 's are error-correction terms, and ε_t 's are disturbances.

The Granger causality test is applied by calculating the F-statistic based on the null

¹ A variable that is found to be stationary at level, or is $I(0)$, is treated as an exogenous variable in the system.
² If the variables in a system are cointegrated, then the short-run analysis of the system should incorporate the error-correction term (ECT) to model the adjustment for the deviation from its long-run equilibrium.
³ When an ECT is added to the vector autoregressive model (VAR), the modified model is referred to as the vector error-correction model (VECM). VECM is thus a special case of VAR.

hypothesis that the set of coefficient for the lagged values of independent variables are not statistically different from zero. If the null hypothesis is not rejected, then it can be concluded that the independent variable does not cause the dependent variable. For instance, if the F-statistic of the real wages (W as an independent variable in the equation) is significant at a 5% level (i.e. $H_0: \beta_i(L) = 0$, for i refers to W, is rejected at a 5% significance level), and the employment (EM) is the dependent variable of the equation, then we can say that there is a short-run causal effect running from W to employment. Besides the detection of the short-run causal effects, the VECM also allows us to examine the effective adjustment towards equilibrium in the long run through the significance or otherwise of the t -test of the lagged error-correction terms (ECT) of the equation.

ESTIMATED RESULTS AND INTERPRETATIONS

Unit Root and Cointegration Tests

Table 2 presents the result of the ADF and Phillip-Perron (P-P) unit root tests of real output, labour productivity, employment and real wages. The results support the presence of a unit root at the level of all variables and the absence of any unit root after first differencing; in other words, all variables are $I(1)$. This reveals that all variables are nonstationary in the levels, but stationary in the first differences.

The Johansen cointegration test is performed to a system of four $I(1)$ variables for the E&E sub-sector and the estimated results are reported in Table 3. The results reveal that there is one cointegrating vector in the system.

This indicates that there a long-run equilibrium relationship exists in the four variables, namely real output, labour productivity, real wages and employment.

It is assumed that there is no deterministic trend in data, no intercept and trend in the cointegrating equation. Outputs of the Johansen's test suggest that one cointegrating vector exists based upon the λ_{max} and trace statistics at 1 % level (Panel I). Both of the tests suggest rejection of zero cointegrating vector in favour of one. The cointegrating equation was estimated with a provision for three lags and no serious serial correlation or normality problem was found with the inclusion of this number of lags (Panel III). The estimated cointegrating vector has theoretically plausible coefficients. The long run relationship may be written as:

$$LRO_t = 3.11*LLP_t + 1.85*LEM_t - 1.717*LWAGE_t$$

The equation indicates that higher labour productivity and employment yield positive influence on the real output of the industry in the long run with estimated elasticities of 3.11 and 1.85 respectively. On the contrary, real wage increase seems to cause a decrease in the E&E industry real output with estimated elasticity of

TABLE 2
Results of the unit root tests

	Augmented Dickey Fuller Test		P-P Test	
	Constant with Trend	Constant without Trend	Constant with Trend	Constant without Trend
	Level			
RO	-2.7138(1)	-0.8549(1)	-2.5292(2)	-1.2715(2)
LP	-1.0618(0)	0.8572(1)	-0.6678(2)	1.6605(2)
EM	-1.4506(0)	-0.8852(0)	-2.0031(2)	-0.8645(2)
W	-3.3737(0)	-1.2608(0)	-3.4764(1)	-1.3725(1)
	First Difference			
RO	-5.9108(1)**	-6.0524(1)**	-3.7785(2)*	-4.0262(2)**
LP	-5.1127(0)**	-4.3324(1)**	-6.0199(2)**	-4.9233(2)**
EM	-3.0697(0)	-3.0725(0)*	-3.2019(2)	-3.1561(2)*
W	-6.1585(0)**	-6.3436(0)**	-6.3505(2)**	-6.5678(2)**

Notes: RO = real output; LP = labor productivity; EM = employment; W = Real wages. The asterisk * and ** indicates the level of significance at a 5 % and 1 % level respectively. The number in each parenthesis indicates the optimal lag length used in the regression, which is determined by the Akaike information criterion (AIC), to ensure the whiteness of the residual.

TABLE 3
Results of Johansen and Juselius multivariate procedure, VAR with 3 lags
sample period: 1973-1997 (25 observations)

I. Eigenvalue						
	0.942627	0.587569	0.281412	0.0019842		
Hypothesis	Maximum Eigenvalue			Trace		
Ho:rank=p	-Tlog(1- μ)	using T-nm	95%	-TSum log(.)	using T-nm	95%
p = 0	62.88**	40.01**	27.1	89.68**	57.07**	47.2
p <= 1	19.49	12.4	21.0	26.8	17.05	29.7
p <= 2	7.27	4.627	14.1	7.314	4.654	15.4
p <= 3	0.0437	0.02781	3.8	0.0437	0.02781	3.8
II. Estimated Cointegrating Vector						
	LRO	LLP		LEM		LW
	1.0000	-3.1105		-1.8496		1.7167
III. Test for Appropriate Lag Length (3)						
	LRO	LLP		LEM		LW
i) Serial Correlation						
$\chi^2(1)$	2.0147 [0.1558]	0.25286 [0.6151]		8.656 [0.0342]*		0.0827 [0.7736]
F(1, 12)	1.2097 [0.2930]	0.13953 [0.7153]		0.1976 [0.6645]		0.0453 [0.8350]
ii) Normality: $\chi^2(2)$						
	5.5816 [0.0614]	0.96614 [0.6169]		5.2299 [0.0732]		0.5446 [0.7617]
iii) Vector AR 1-1 F(16, 18)				= 2.0802 [0.1870]		
iii) Vector normality $\chi^2(8)$				= 11.826 [0.1591]		

Note:

** indicates significance at 1% level.

* indicates significance at 5% level.

Figures in square parentheses [] refer to marginal significance level.

TABLE 4
Causality results based on vector error correction model for electrical and electronic sub-sector (lag 3)

	Estimated F-Statistic (joint Wald test)				ECT	
	D(LRO)	D(LLP)	D(LEM)	D(W)	Coefficient / (t-Statistic)	
D(LRO)	-	2.689***	0.9398	4.348***	-0.8302 / (-2.15)**	
D(LLP)	2.030*	-	2.593**	2.194**	-0.894 / (-14.34)***	
D(LEM)	2.880**	2.456**	-	1.1109	-0.0306 / (-1.1867)	
D(LW)	2.014*	0.882	1.6238	-	-0.545 / (-3.101)**	

Note: *, ** and *** denote statistically significant at 10%, 5% and 1% respectively.

-1.717.

The Short Run Dynamic Relationship

The short run interaction among the four variables are estimated using the vector error correction model. The results of the VECM are reported in Table 4. Following the Johansen multivariate cointegration test, one error-correction term is incorporated in the VECM. The error correction coefficients are significant in three of the equations i.e. that of real output, labour productivity and real wage suggesting

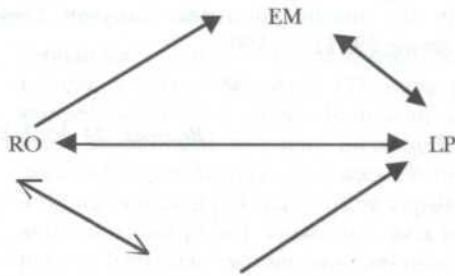
that real output, labour productivity and real wage are adjusted to divergence from long-run equilibrium steady state.

The results in Table 4 imply that RO, LP and W are endogenous while EM is weakly exogenous. The estimated results also reveal that there is a unidirectional causal effect running from labour productivity and employment to real output. Both labour productivity and real wage significantly cause real output at 1% level of significance. We could also see a unidirectional causal effect from real wage to labour productivity

and from real output to employment. Bi-directional causal effect seems to prevail between employment and labour productivity.

The summary of the short run dynamic relationship between the variables may be illustrated using the following diagram:

Results of diagnostic tests (Table 5) indicate that the estimated short run dynamic models are quite robust as they generally pass all the tests of LM for auto-correlation, J-B for normality, and the Ramsey general specification test for specification (except for the LLP which is significant barely at 5%).



CONCLUSION AND IMPLICATIONS

Global development and the domestic developments in the Malaysian manufacturing scenario which is basically highly dependent on E&E sub-sector provides justification for a thorough understanding of the short run and long relationship between real output, labour

influence productivity growth may amplify fluctuations in employment rate. This study attempted to investigate the linkages between these variables over the 1973 - 1997 period in order to provide a historical perspective on this issue using the VAR model.

The estimated results indicate that there is a long run equilibrium relationship among real output, labour productivity, employment and real wages of the E&E sub-sector. The short-run dynamic interaction shows that productivity and real wage are quite significant factors affecting the output. In the meanwhile, changes in productivity are associated with changes in real wage, employment and real output. Real output and labour productivity are also responsible for changes in employment and finally, real output does indeed affect real wage.

An important implication from this study is that productivity can indeed play an important role in the real output of the E&E sub-sector in the long run as well as short run. Our long run model reveals that availability of more labour is associated with an increase in output while a real wage increase can adversely affect the real output. Thus, it is imperative that policy makers intensify efforts to improve the level of productivity in the sub-sector, and at the same time ensure that the increase in level of real wage reflects the productivity of labour.

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TABLE 5
Diagnostic checking for the VECM

Test	LM(4)	ARCH(4)	J-B	RESET(1)
LRO	0.528	0.082	1.77	2.62
LLP	0.332	0.239	0.571	4.897*
LEM	0.832	0.169	0.815	0.08
LW	0.750	0.155	3.304	1.35

Note: *and ** denote statistically significant at 5% and 1% respectively.

productivity, employment and wage in the sub-sector. As is widely known, manufacturing as a whole sector is positioned as the main engine of growth for the nation's development and has been experiencing fundamental changes in technology and liberalization of competition. Among all industries, the E & E sub-sector has absorbed the highest number of employment. Therefore, changes in wage rate in order to

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Apakah Nilai Kerja Pekerja Kilang?

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Kata kunci: Nilai kerja, soal selidik, pekerja kilang, autonomi, kreativiti

ABSTRAK

Tujuan kajian ini ialah untuk menentukan nilai kerja di kalangan pekerja kilang di daerah Hulu Langat, Selangor. Sebanyak 451 orang pekerja kilang telah dipilih secara rawak untuk menjadi sampel kajian. Soal selidik digunakan untuk mengumpul data tentang latar belakang dan nilai kerja responden. Dapatan menunjukkan pekerja kilang menganggap jaminan pekerjaan, perkembangan kerjaya, ganjaran ekonomi, keadaan tempat kerja, kreativiti, gaya hidup dan hubungan antara pekerja penting kepada mereka. Mereka tidak begitu mementingkan nilai kerja autonomi dan prestij. Selain itu, data menunjukkan terdapat perbezaan yang signifikan antara pekerja lelaki dan perempuan bagi nilai kerja kreativiti, hubungan antara pekerja dan autonomi. Pekerja lelaki didapati lebih mementingkan nilai-nilai tersebut berbanding pekerja wanita.

ABSTRACT

The purpose of this study was to determine the work values among factory workers in the district of Hulu Langat, Selangor. A total of 451 factory workers were randomly selected as the sample of the study. Questionnaires were used to collect the data pertaining to the background and work values of the respondents. The findings showed that factory workers assumed that job security, career development, economic rewards, workplace condition, creativity, life style, relation with other workers were important to them. Autonomy and prestige were not so important to them. In addition, the data showed that there was a significant different between male workers and female workers in the values of creativity, relation with other workers and autonomy. Male workers were found to regard these values as more important to them compared to female workers.

PENDAHULUAN

Kerja adalah fenomena penting dalam kehidupan manusia. Kebanyakan manusia menghabiskan sebahagian besar kehidupan mereka bekerja dalam pekerjaan tertentu yang berbayar. Mereka mempunyai nilai kerja yang mungkin mempengaruhi kerja yang mereka lakukan. Dalam hampir semua budaya, nilai kerja adalah bahagian penting bagi keseluruhan set nilai. Nilai kerja telah didefinisikan oleh Super dan Sverko (1995) sebagai suatu set kepercayaan tentang apa yang baik dan diinginkan berkaitan dengan peranan kerja seseorang dan dianggap sebagai sesuatu yang stabil. Selain itu, Isaacson dan Brown (1997) menyatakan bahawa nilai adalah suatu standard yang mencorakkan tingkah laku seseorang.

Nilai kerja adalah penting dalam kehidupan setiap pekerja. Kajian yang dijalankan oleh Putti

et al. (1989), sebagai contoh, mendapati nilai kerja intrinsik mempunyai hubungan yang signifikan dengan komitmen pekerja kepada organisasi. Salah satu cabaran utama yang dihadapi oleh organisasi ialah bagaimana untuk menarik minat, memotivasi dan mengekalkan pekerja, terutama pekerja muda, yang mempunyai nilai kerja yang mungkin berlainan daripada orang tua mereka (Loughlin dan Barling 2001). Begitu juga dengan dapatan kajian Stern *et al.* (1990) yang mendapati pekerja, terutama yang muda, suka bekerja di tempat kerja yang lebih selesa berbanding orang tua mereka.

Terdapat beberapa pembolehubah yang mungkin mempunyai hubungan dengan nilai kerja. Untuk kajian ini, fokus hanya diberikan untuk mengenal pasti sama ada terdapat perbezaan nilai kerja yang signifikan wujud

antara pekerja lelaki dan perempuan. Kajian yang dijalankan oleh Vedanovich dan Kramer (1989), umpamanya, mendapati tidak terdapat perbezaan yang signifikan dalam sebarang nilai kerja antara pekerja lelaki dan perempuan. Bagaimanapun, kajian yang dijalankan oleh Kraska (1991) mendapati sebaliknya, iaitu responden perempuan mempunyai nilai kerja yang lebih positif berbanding responden lelaki. Daripada perbincangan di atas, terdapat keperluan untuk menjalankan kajian tentang nilai kerja pekerja di negara ini. Kajian sebegini jarang dijalankan di Malaysia. Dengan mengkaji tentang nilai kerja pekerja, kita dapat belajar dengan lebih mendalam lagi tentang apa yang diharapkan oleh tenaga kerja masa depan negara (Loughlin dan Barling 2001). Di samping itu, data yang diperolehi boleh digunakan sebagai panduan dalam memadamkan nilai kerja pekerja dengan pekerjaan yang akan diceburi.

OBJEKTIF

Objektif kajian ini ialah untuk (1) meninjau nilai kerja di kalangan pekerja kilang di daerah Hulu Langat, Selangor, dan (2) mengenal pasti sama ada terdapat perbezaan nilai kerja yang signifikan antara pekerja lelaki dan pekerja perempuan.

METODOLOGI

Kajian ini adalah kajian deskriptif yang menggunakan soal selidik untuk mengumpul data. Populasi kajian ialah pekerja dalam pelbagai kategori pekerjaan di pelbagai jenis industri atau bidang usaha di daerah Hulu Langat, Selangor. Oleh kerana kajian ini terbatas kepada populasi pekerja kilang di daerah Hulu Langat, maka dapatan kajian tidak dapat digeneralisasi kepada pekerja kilang di tempat lain di Malaysia. Jumlah sebenar pekerja kilang di daerah Hulu Langat tidak dapat ditentukan, maka dalam pemilihan sampel, formula Cochran (1977) digunakan. Dengan menggunakan formula tersebut, jika jumlah populasi yang tidak diketahui atau infiniti, jumlah minimum sampel yang diperlukan ialah 400. Bagaimanapun, untuk kajian ini sebanyak 451 pekerja kilang yang dipilih secara rawak mudah dilibatkan sebagai responden. Oleh kerana penyelidik bersama-sama dengan pembantu penyelidik yang mentadbir sendiri soal selidik, maka semua pekerja yang terpilih sebagai sampel kajian dapat ditemui dan memberi respons mereka.

Instrumen untuk mengukur nilai kerja pekerja kilang telah dibentuk oleh penyelidik dengan mengubah suai instrumen yang dibentuk oleh Super dan Nevill (1986) dan Wu (1985). Sebanyak sembilan nilai kerja diukur, iaitu jaminan pekerjaan, perkembangan kerjaya, ganjaran ekonomi, keadaan tempat kerja, kreativiti, gaya hidup, hubungan antara pekerja, autonomi dan prestij. Setiap nilai kerja mempunyai lima item. Skala yang digunakan ialah 1 untuk sangat tidak penting, 2 sebagai tidak penting, 3 penting dan 4 sebagai sangat penting kepada responden.

Instrumen yang dibentuk telah diberikan kepada panel pakar terdiri daripada enam orang pensyarah untuk meneliti item yang telah dibina. Komen yang diberikan oleh panel pakar digunakan untuk membaiki item dalam instrumen berkenaan supaya lebih difahami oleh responden. Instrumen tersebut kemudiannya dimasukkan ke dalam soal selidik untuk dikaji rintis. Sekumpulan 25 pekerja yang tidak terlibat dalam kajian ini dijadikan sebagai responden dalam kajian rintis. Data yang dikumpul digunakan untuk membaiki soal selidik dan juga menganalisis pekali kebolehpercayaan instrumen. Hasil analisis mendapati pekali kebolehpercayaan instrumen untuk mengukur sembilan nilai kerja ialah antara .84 hingga .94. Pekali kebolehpercayaan nilai kerja secara keseluruhan ialah .90.

Soal selidik telah ditadbir sendiri oleh penyelidik dan pembantu penyelidik dengan berjumpa pekerja yang dipilih secara rawak di tempat kerja mereka. Secara purata, responden mengambil masa 10 minit untuk melengkapkan soal selidik. Penyelidik dan pembantu penyelidik mengumpul soal selidik yang siap diisi.

Data yang dikumpul dianalisis dengan menggunakan perisian SPSS. Data deskriptif dianalisis dengan menggunakan statistik deskriptif seperti frekuensi, peratusan, min dan sisihan piawai. Perbezaan nilai kerja antara pekerja lelaki dan pekerja perempuan ditentukan dengan menggunakan ujian t.

DAPATAN

Semua responden telah menjawab dan mengembalikan soal selidik. Daripada jumlah tersebut, 242 (53.7%) pekerja adalah lelaki dan 209 (46.3%) adalah perempuan. Kebanyakan mereka (66%) mendapat pendidikan tertinggi sekolah menengah dan 20% daripada mereka

mendapat pendidikan tertinggi universiti. Dari segi umur, purata umur mereka ialah 25 tahun. Responden termuda berumur 15 tahun dan responden tertua berumur 59 tahun. Majoriti responden (75%) menerima gaji sebanyak RM1,000 dan kurang, Hanya 25% daripada mereka menerima gaji lebih RM1,000.

Secara keseluruhan, responden mempunyai nilai kerja yang positif ($\text{min} = 3.17$, $\text{sd} = .35$). Jika disusunaturkan nilai-nilai kerja mengikut min tertinggi kepada min terendah, nilai kerja yang dikatakan penting oleh responden ialah jaminan pekerjaan, perkembangan kerjaya dan ganjaran ekonomi, manakala nilai kerja keadaan tempat kerja, kreativiti, gaya hidup dan hubungan antara pekerja dianggap sebagai sederhana penting. Dua nilai kerja dianggap kurang penting oleh responden, iaitu autonomi dan prestij (Jadual 1).

Dapatan kajian juga mendapati terdapat perbezaan nilai kerja yang signifikan bagi beberapa nilai kerja di antara pekerja lelaki dan pekerja perempuan. Nilai-nilai kerja tersebut ialah kreativiti, hubungan antara pekerja dan autonomi. Bagaimanapun, secara keseluruhannya tidak terdapat perbezaan yang signifikan antara pekerja lelaki dan pekerja perempuan (Jadual 2). Bagi nilai kerja yang terdapat perbezaan, responden lelaki menganggap nilai kerja berkenaan lebih penting kepada mereka berbanding dengan responden perempuan.

PERBINCANGAN

Dapatan kajian ini menunjukkan bahawa pekerja kilang terutama di kawasan Hulu Langat,

Selangor yang kebanyakan mereka tidak berpendidikan tinggi dan menerima gaji sebanyak RM1,000 ke bawah, lebih mementingkan nilai kerja seperti jaminan pekerjaan, perkembangan kerjaya dan ganjaran ekonomi. Mereka menganggap keadaan tempat kerja, gaya hidup dan hubungan antara pekerja sebagai sederhana penting, manakala autonomi dan prestij sebagai kurang penting. Dapatan ini jelas menggambarkan keadaan realiti kehidupan golongan pekerja berpendapatan rendah yang lebih mementingkan pendapatan untuk menampung kehidupan mereka di sebalik memikirkan tentang autonomi atau kuasa dan prestij.

Dapatan kajian ini menunjukkan pekerja lelaki lebih mementingkan nilai kerja autonomi, kreativiti dan hubungan antara pekerja berbanding pekerja perempuan. Perbezaan ini timbul mungkin disebabkan oleh pelbagai sebab atau faktor. Pekerja lelaki mungkin lebih suka kepada kerja yang membolehkan mereka bekerja sendiri atau mempunyai autonomi sebagai individu yang mempunyai ego diri, dan di samping itu dapat memberi sumbangan kepada pekerjaan mereka secara lebih kreatif. Mungkin dapatan kajian ini akan berbeza bagi pekerja di dalam sektor lain, terutama mereka yang bekerja dalam pekerjaan pada peringkat atasan dalam hierarki pekerjaan dalam sesebuah organisasi. Bagaimanapun, dapatan kajian ini selari dengan kajian Kaufman dan Fetter (1980) dan Kanchier dan Unruh (1989), iaitu tidak terdapat perbezaan yang signifikan bagi nilai kerja secara keseluruhan antara pekerja lelaki dan pekerja perempuan.

JADUAL 1

Nilai kerja pekerja kilang di kawasan Hulu Langat

Nilai Kerja	Min	Sisihan Piawai
Jaminan Pekerjaan	3.47	0.49
Perkembangan Kerjaya	3.41	0.41
Ganjaran Ekonomi	3.39	0.46
Keadaan Tempat Kerja	3.16	0.45
Kreativiti	3.15	0.49
Gaya Hidup	3.08	0.48
Hubungan Antara Pekerja	3.07	0.49
Autonomi	2.96	0.57
Prestij	2.71	0.70
Nilai Kerja Secara Keseluruhan	3.17	0.35

Skala: 1 = Sangat Tidak Penting; 2 = Tidak Penting; 3 = Penting; 4 = Sangat Penting (n = 451)

JADUAL 2

Perbezaan nilai kerja antara responden lelaki dan responden perempuan (n = 451)

Nilai Kerja	t	Sig.(p)
Kreativiti	3.55	0.00
Hubungan Antara Pekerja	2.40	0.02
Autonomi	2.33	0.02
Gaya Hidup	1.76	0.08
Perkembangan Kerjaya	1.23	0.22
Prestij	0.70	0.49
Ganjaran Ekonomi	-0.29	0.78
Jaminan Pekerjaan	-0.27	0.79
Keadaan Tempat Kerja	0.17	0.87
Nilai Kerja Secara Keseluruhan	1.86	0.06

CADANGAN

Berdasarkan kepada dapatan kajian ini, berikut dicadangkan beberapa perkara yang boleh diambil tindakan oleh majikan jika hendak membentuk persekitaran kerja yang baik dan selesa kepada pekerja.

1. Majikan perlu mengelak daripada mengamalkan stail kepemimpinan autoritarian, terutama apabila mempunyai ramai pekerja lelaki. Dapatan kajian menunjukkan pekerja lelaki lebih mementingkan nilai kerja autonomi, kreativiti dan hubungan antara pekerja. Stail kepemimpinan autoritarian kurang sesuai dengan pekerja yang mempunyai nilai kerja berkenaan.
2. Untuk menambahkan peluang kepada pekerja maju dalam kerjaya mereka, pihak majikan patut menggalakkan pekerja meneruskan pendidikan pada peringkat yang lebih tinggi. Pencapaian mereka dalam pendidikan patut dihargai dengan menawarkan pekerjaan yang lebih baik kepada mereka. Ini selaras dengan perkembangan kerjaya yang merupakan nilai kerja kedua penting kepada mereka.
3. Majikan juga perlu memberi peluang kepada pekerja, terutama pekerja lelaki, berkomunikasi antara satu dengan yang lain. Mungkin cara terbaik ialah dengan menyediakan bilik khas untuk mereka berehat pada waktu-waktu tertentu atau menyediakan kantin di mana mereka boleh bertemu pada waktu rehat. Bagaimanapun, peluang seperti itu perlu diberikan dengan lebih berhati-hati kerana kemungkinan pengaruh rakan sekerja lain, terutama yang jahat, akan menjejaskan prestasi pekerja terlibat (Tanner dan Krahn 1991).
4. Suatu kajian yang lebih menyeluruh dan meliputi pelbagai golongan pekerja perlu dilakukan untuk mengenal pasti nilai kerja pekerja di dalam pelbagai pekerjaan yang berbeza. Maklumat yang diperolehi daripada kajian berkenaan boleh digunakan untuk memadamkan bakal pekerja yang mempunyai nilai kerja tertentu dengan pekerjaan yang sesuai dengan nilai kerja mereka.

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English Relative Clauses: What Malay Learners Know and Use

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Keywords: Second language acquisition, relative clauses, grammaticality judgement task, learners' competence, sentence combination, relativisation

ABSTRAK

Pelajar bahasa Inggeris sebagai bahasa kedua menghadapi masalah semasa memperoleh klausa relatif (Hawkins and Chan 1997; Wong 1999). Kajian ini meneliti dan menerangkan keadaan pelajar dalam menggunakan klausa relatif. Bahasa ibunda pelajar-pelajar L2 yang terlibat ialah bahasa Melayu. Satu instrumen (*GJT*) dilaksanakan untuk menentukan kebolehan pelajar untuk membezakan klausa relatif yang gramatis dan yang tidak gramatis. Tugasan tersebut memperlihatkan kecekapan terperoleh di kalangan pelajar dalam kajian. Kecekapan ini seterusnya diteliti dalam konteks tugas penghasilan yang mengukur kebolehan mereka membentuk klausa relatif melalui penggabungan ayat. Keputusan daripada *GJT* menunjukkan skor rendah yang konsisten daripada pelbagai ekstruksi dalam membina klausa relatif. Keseluruhannya, pelajar Melayu gagal mengenal dan menghasilkan binaan klausa relatif yang sesuai. Data tersebut mengesahkan penemuan lain bahawa klausa relatif adalah punca masalah bagi pelajar L2 dan boleh membawa kepada implikasi pedagogi dalam pembelajaran komponen tatabahasa yang penting ini.

ABSTRACT

Second language (L2) learners have problems when acquiring relative clauses (Hawkins and Chan 1997; Wong 1999). This study examines and attempts to explain the learners' competence in the use of relative clauses. The L2 learners are L1 (first language) speakers of Malay who were gauged to have elementary proficiency in English by the Oxford Placement Test. A grammaticality judgment task (*GJT*) was administered to determine the subjects' ability to distinguish between the grammatical and ungrammatical forms of relative clauses. The task revealed the students' acquired competence in this particular area. This competence is further examined in the context of a production task which gauged their ability to form relative clauses through sentence combining. Results from the *GJT* showed consistently low scores for a variety of extractions from various positions in the formation of relative clauses. This is further supported by the results obtained from the sentence-combination task where the production of correct sentences using relative clauses was the focus. In sum, the Malay learners failed to recognise and produce appropriate relative clause constructions. The data confirmed other findings that relative clauses are a source of difficulty for these L2 learners and these findings have pedagogic implications for the learning of this essential grammar component.

INTRODUCTION

A relative clause is a basic structure that could be subordinated to another clause and it undergoes a process of embedding. In forming a relative clause a constituent becomes 'missing' inside the clause and that is represented by a *wh*-

constituent (Börjars and Burridge 2001:221). Keenan and Comrie (1977) posit that there are restrictions imposed on noun phrases (NPs) that can be relativised. The most accessible for the relativisation process is the subject and the least accessible is the object NP of comparison.

In English, relativisation is accessible from most positions.

RELATIVE CLAUSE FORMATION IN ENGLISH

Formation of relative clauses in English involve movement of a *wh*-phrase to the specifier position of the Complementizer Phrase (CP) in the embedded clause (Chomsky 1986b and subsequent work). This movement leaves a trace in the position from which the *wh*-phrase has moved. The movement is presented below using the conventional linguistic symbols:

- 1a. The teacher_i [_{CP} who_i Ø [Maria will invite t_i]] is Mr Ali.
- 1b. The teacher_i [_{CP} Op_i that [Maria will invite t_i]] is Mr Ali.
- 2a. The teacher_i [_{CP} who_i Ø [t_i will accept the invitation]] is Mr Ali.
- 2b. The teacher_i [_{CP} Op_i that [t_i will accept the invitation]] is Mr Ali.

More example sentences for the various relative clause structures in English are shown in Appendix A (adapted from Celce-Murcia and Larsen-Freeman 1999).

RATIONALE FOR THE STUDY

Hawkins and Chan (1997) and Wong (1999) have found that relativisation is problematic among L2 learners. There is a need to further extend this area of investigation situated in a localised population to better understand the acquisition of relative clauses by L2 learners.

L2 learning in Malaysia addresses also the issue of ethnicity which is a major characteristic in this L2 composite language environment. The study focuses on the L1 Malay speakers who comprise the dominant ethnic group with Malay as the national language and the medium of instruction in school. A study of this nature will shed light on the status of the learnt domain that is manifested in use among this large group of L2 learners.

An initial exploration of common types of errors in the use of relative clauses form the stepping stone for the investigation. This approach rationalises the move from the known to the unknown as finally the problems are expected to be infinite.

Researchers have found that one of the common problems in the use of the relative clauses is when the object pronoun in the

embedded sentence is retained in the form of a pronominal reflex (copy) or a resumptive pronoun. The following is an example:

Shirley called out to the boy that/who she knew him.

Two other types of constraints that are frequently used in grammaticality judgment tasks to test L2 learners' knowledge of relative clauses are Complex Noun Phrases (CNP) and *wh*-Islands, for example:

3. **These are the students who I heard the rumour will help you solve the problem.* (CNP)
4. **The girl who I think why likes you come from a respectable family.*
(*wh*-Island)

Second language acquisition (SLA) studies (e.g. Ioup and Kruse 1977) have found that there is only a limited variety of extractions for relativisation and they involve either the subject or the object in the clause. Object extraction is found to be harder to acquire than subject extraction. This distinction is addressed in this study. The extractions used in the study are illustrated below.

5. Subject extraction – *The girl who speaks Tamil is my cousin.*
6. Object extraction – *I know the place that you visited.*
7. Prepositional Object extraction – *The boy whom you gave the ball to is my cousin.*

Subject extraction, object extraction and object of preposition extraction may occur in both the main (upper) and embedded clauses.

OBJECTIVE OF THE STUDY

The general objective of the study was to examine the grammaticality judgment of English relative clauses among Malay students and to identify some of the common problems that they face in the construction of these structures.

Specifically, the study sought to determine differences in the recognition and judgment of relative clauses with extractions from the positions of subject, object and prepositional object found in upper and embedded clauses. It also investigated the manner in which learners manifest their ability in the construction of relative clauses through a sentence-combination task. Both the tasks would reveal the students' competence and performance in relation to relative clause formation in English.

METHODOLOGY

The study used a standardised proficiency test, the Oxford Placement Test (Allan 1992) to gauge the subjects' linguistic competence. After the establishment of the subjects' general competence, a grammaticality judgment task (GJT) was administered. This task comprised grammatical and ungrammatical relative clauses. Examples of the grammatical and ungrammatical relative clauses with extractions from the various positions are found in Appendix B. Altogether there were 12 items, 6 grammatical and 6 ungrammatical, for each type of extraction. The grammatical structures were paralleled with the ungrammatical ones.

Another task that was used to gather data was a sentence combining task. This task complements the GJT in understanding the use of the relative clauses among the subjects. The items required the subjects to form relative clauses with extractions from the subject, direct object and prepositional object positions from given pairs of sentences with a focus on the use of relative pronouns (*who, whom, which, that, where and why*).

The GJT was scored following a marking scheme in which answers were given marks according to the acceptability criterion. The responses followed a four-point scale ranging from totally acceptable to totally unacceptable. Scoring was done according to marks that ranged from 0 to 3. Thus, a correct response was given a score of 3 while an incorrect response was scored 0. Intermediate responses were given either 1 or 2 depending on the degree of unacceptability.

The sentence combination task was not given scores as we are interested in the qualitative nature of problem construction. In the analysis, problem constructions are grouped together to obtain a pattern of regularities.

Ninety-four Malay learners of L2 English took part in the study. They were secondary and

post-secondary students at various public institutions in the Klang Valley in Malaysia. From the Oxford Placement Test, the majority of the students were found to be placed in the elementary level within a band of 50-64%.

RESULTS AND DISCUSSION

The results and discussion are presented according to the tasks given in the study.

The Grammaticality Judgement Task

The following are results obtained from the GJT. Responses to the grammatical structures are first presented followed by those involving the ungrammatical ones.

As can be seen from Table 1, these elementary level subjects are generally weak in the acquisition of English relative clauses. There appears to be little difference in their ability to recognise and judge these structures located in upper clauses and embedded clauses as all the learners scored below the 50% mark. Especially difficult is object extraction from the upper and embedded clauses (33.9% and 34.5% respectively). Structures such as "I know the place that you visit" is seen to be more difficult to recognise and judge as grammatical compared to structures such as "The girl who speaks Tamil is my cousin". This confirms earlier studies which had concluded that object extraction posed more difficulties than subject extraction in relative clause formation among L2 learners. The extraction of the object proved to be the most difficult with an average percentage score of 34.5%, compared to 39.9% (extraction from subject) and 41.9% (extraction from prepositional object).

In the recognition of ungrammatical relative clauses, the subjects showed a lack of intuition with regard to the grammatical status of the structures. They lack the ability to distinguish between grammatical and ungrammatical relative clause structures. The trend, as exhibited in the

TABLE 1
Mean of correct judgements (%) on grammatical relative clauses involving
extraction from the upper and embedded clauses

N=94	Extraction of subject (active)	Extraction of object	Extraction of prepositional object
Extraction from Upper Clauses	40.4	33.9	38.3
Extraction from Embedded Clauses	39.9	34.5	41.9

recognition and judgment of grammatical relative clauses, is reflected in the judgment of the ungrammatical relative clauses with extraction from embedded clauses (Table 2).

Table 2 shows the response judgment to ungrammatical relative clauses. Interestingly, a similar trend is exhibited, in which the highest score went to object extraction from both the upper and embedded clauses (33.1% and 35.1% respectively). The learners had the most difficulty in recognising these structures as ungrammatical. The scores are even lower than the recognition of the grammatical counterparts in the upper and embedded clauses.

On the whole, the Malay learners were unable to distinguish clearly between the grammatical and ungrammatical relative forms. When they had to decide on whether clauses were ungrammatical, they made even more errors. The data suggested that learners' interlanguage stabilises at a rather low level as far as the use of the relative clause is concerned. There is, therefore, no distinction made by these elementary students between different types of relative clauses with regard to their grammatical properties.

The difference in relative clause formation in Malay and English may have a bearing on the performance of the respondents. The learners first started learning English at the age of seven. At that level, they were already exposed to the foundations of relative clause formation in Malay which has a different formation system from English. As a result, they may not be able to use the new input in the target language (English) in constructing well-formed relative clauses especially when English is taught only as a subject, with exposure and use being minimal outside the classroom.

Sentence-combination Task

The sentence-combination task, in which the items are regarded as the controlled stimuli, revealed the weaknesses of the learners in the productive aspect. Nine stimuli were used. They were designed to tap the production of a variety of relative clauses with extractions from different positions using different relative pronouns (*who, whom, which, that, where and why*). A lead-in is provided to guide the expected answer. The sentences produced from the stimuli are discussed according to the type of extraction focused on. The following are two examples.

Example 1 (stimulus)

The student is Muthu.

Muthu causes the most problems.

The student _____

Example 2 (stimulus)

The student is Muthu.

I observe Muthu causes the most problems.

The student _____

The least problematic of the relative clause formation is subject extraction from the upper clause. The common problem, as illustrated below, is the occurrence of a fragment which shows the inability of the students to construct a complete sentence that incorporates a subject relative clause.

8. *The student who causes the most problems.

Subject extraction from the embedded clause proves to be even more problematic. The constructions produced are:

9. *The student which observe causes the most problems.

10. *The student whom I observe Muthu causes the most problems is Muthu.

TABLE 2
Mean of correct judgements (%) on ungrammatical relative clauses
involving extraction from the upper and embedded clauses

N=94	Extraction of subject (active)	Extraction of object	Extraction of prepositional object
Extraction from Upper Clauses	29.9	33.1	29.3
Extraction from Embedded Clauses	27.4	35.1	25.7

11. *The student which observe Muthu causes the most problems is Muthu.
12. *The student that I observe the most problems is Muthu.
13. *The student who Muthu I observe causes the most problems is.

From the examples, it is clear that the use of a nominal copy/reflex (sentence 10) is a feature. In sentence 10, the noun phrase or nominal copy, *Muthu*, is produced in the object position in the upper clause. This problem is not unique to our subjects as the same problem has been found in L2 learners from different L1 backgrounds (Hyltenstam 1984). Other than sentence 10, nominal copies and resumptive pronouns are also produced in relative clauses formed from other pairs of sentences given in the task. A nominal or pronominal copy is used when the learner is not able to extract the noun phrase from a particular position in the clause. As a result, a pronoun or a nominal copy is base generated in-situ. The *wh*-Islands and the CNPs used in the GJT to represent problematic relative clauses are not manifested as productive problems in the sentence combination effort. A semi-controlled task of this nature might have ruled out to a large extent such ungrammatical constructions. Instead, we uncovered other features which are discussed below.

The lack of awareness of clause constituents is an obvious compounding problem as a subject could be absent (sentence 11) and the essential presence of a verb in the embedded clause is also not realised (sentence 12). The common confusion with relative pronoun forms (sentence 9) is also found. Another problem that pervades among learners is the failure to recognize and extract the subject from the embedded clause because of the distance of the extraction site from the head noun of the relative clause.

Another kind of problem is associated with use of the passive and the 'by' adjunct. The following presents the controlled stimulus and the various ungrammatical relative clauses produced by the learners.

Example 3 (Stimulus)

Corruption is the way to become rich.
 Marcos became rich by choosing corruption.
 Corruption _____.

14. *Corruption is the way that make Marcus became rich.
15. *Corruption is the way that Marcos became rich by choosing corruption.
16. *Corruption is the way to become rich that chosen by Marcus.
17. *Corruption which Marcos became rich by choosing corruption is the way to become rich.

It is worthy at this point to compare the Malay and English systems of relativisation to note the differences in the operation of the passive formation.

In Malay, the passive is used frequently (and is an obligatory feature as well) in relativisation as in :

18. *Guru yang difikir (oleh) mereka t menggunakan komputer itu ialah Encik Ali.*

Translated:

*Teacher C PASS+think (By) them
 ACT+use computer the is Mr Ali.

Grammatical form:

The teacher whom they think uses the computer is Mr Ali.

19. *Doktor yang t ditolak oleh John ialah Dr Tan*

Translated: *Doctor C PASS+push by John is Dr Tan

Grammatical forms:

The doctor who is pushed by John is Dr Tan

The doctor who John pushed is Dr Tan.

In English, we have two acceptable forms when the object is embedded in relativisation. Following the example above, the answers students could choose to construct are:

- 20a. *Corruption is the way that Marcos chose to become rich.*
- 20b. *Corruption is the way that was chosen by Marcos to become rich.*

But in Malay the use of the passive is imperative. This likely leads to the inability to distinguish the use of the adjunct *by choosing corruption* and the passive *is chosen by*. Instead of CNPs, what is evident could be termed as 'complex adverbial adjuncts' (CAAs) where the L2 learners seem to perceive repetition of the subject through the use of such adjuncts as necessary (sentences 15 and 17).

L2 learners also exhibited confusion in the use of cause and effect statements in embedded

clauses. The following highlights the stimulus and the ungrammatical constructions formed by the learners.

Example 4 (Stimulus)

Muscle injury is the reason.
 Foo Kok Keng lost the badminton match because of muscle injury.
 Muscle injury _____.

- 21. *Muscle injury that Foo Kok Keong lost the badminton match because the reason.
- 22. *Muscle injury which Foo Kok Keong lost the badminton match is the reason.
- 23. *Muscle injury is the reason that why Foo Kok Keong lost the badminton match.
- 24. *Muscle injury which Foo Kok Keong had suffer is the reason that cause he lost the badminton match.
- 25. *Muscle injury that Foo Kok Keong lost the badminton match because of muscle injury is the reason.

It is difficult for the L2 learners to use the adverb clause of reason as shown in the above sentences. Sentence 23 shows overlearning in which the L2 learner has tried to use both the complementizer and the relative pronoun at the same time. In English they are mutually exclusive. For sentences 24 and 25, they exhibited the construction of two embeddings. As a result of using two embeddings, the learners also confused the structures with subordination. The errors can be described as compound errors with many confounding features.

Another case of a nominal copy/reflex is shown in sentence 26. This is seen in Example 5 which gives the stimulus and the accompanying ungrammatical relative clauses produced by one of the subjects.

Example 5 (Stimulus) :

The money belongs to her mother.
 I saw Salmah took the money.
 The money _____.

- 26. *The money that I saw Salmah took the money belong to her mother.

In the above ungrammatical sentence, the nominal copy, *the money*, is the object in the embedded clause. In English it is considered redundant to repeat the object once it is relativised.

Other problematic structural areas are in tense and, often, the omission of the linking verb "is" (sentences 27 and 28). These are characteristically problematic for Malay learners, as in the Malay verb system, tense is not indicated when the verb form is changed. In addition, because the Malay verb system does not have an equivalent linking verb, the English linking verb 'is' is often omitted.

- 27. *The money that Salmah had took belongs to her mother.
- 28. *The money which I saw Salmah took is belongs to her mother.

The responses to the stimulus in Example 6 also reveal some interesting ungrammatical structures.

Example 6 (Stimulus):

The man is the police inspector.
 Rashid spoke to the man.
 The man _____.

The learners' constructions are:

- 29. *The man whom Rashid spoke to his is a police inspector.
- 30. *The man who Rashid spoke is a police officer.
- 31. *The man whom Rashid to is a police inspector.

In sentence (29), the learner uses a pronominal copy or resumptive pronoun in the wrong case. As discussed earlier, a pronominal copy is used when the learner is unable to move the noun phrase from a particular position in the clause.

The use of phrasal verbs is another constraint faced by the L2 learners as shown in sentences (30) and (31) where either the verb or the preposition is missing when they formulate the relative clauses.

From the data, it is clear that the Malay learners face a myriad of problems in the construction of relative clauses in English. The complex operation involves, among others, principles of movement, trace and use of obligatory elements, appropriate choice of pronouns, passivisation, and use of finite verb forms in finite clauses. To unravel the maze, the learners will find it necessary to adopt a very systematic approach in order to deconstruct and reconstruct the clauses. This requires the utilization of multiple knowledge bases. The list

of problems obtained and systematised may serve as a useful starting point for both learning and teaching.

To bring the discussion to a close, it is deemed pertinent, for pedagogic considerations, to sum up the features that determine the use of the relative clause (Celce-Murcia and Larsen Freeman 1999). Four main criteria were identified in the construction of relative clauses. The first is the syntactic roles of the head noun and the relative pronoun as an influencing factor. The other refers to the definiteness and specificity of the referent. In other words, one must consider the specific function of the referent, that is whether it refers to the subject or object in the clause. The third criterion involves the status of the referent in terms of animacy or humanness. Finally, the discourse function of the relative pronoun is also an important determinant. The use of the patterns in speech and writing would differ to some extent and the choice of patterns could well be an option exercised by the user of the language in context. The first three were dealt with in explaining the data of the study while the fourth was considered beyond the scope of the study.

Nonetheless, it is noted that in speaking, the relative pronoun is deleted especially when it has a non-human antecedent, for example, *the latest calculator he marketed is cheap*. When prepositional objects are relativised, an option available is the deletion of the relative pronoun or it may be fronted leaving behind the preposition. In writing, the preposition is fronted and used together with *which*. Taking away these obligatory prepositions in the syntactic environment will render the sentences ungrammatical.

Example:

- a. In speech: *Roots is a book which he is currently referring to.*
- b. In writing: *Roots is the book to which he is currently referring.*

Deletion, also known as reduction, offers an option which, unless properly registered by the learner, may give rise to confusion about the subordination process.

- a. *Kuala Lumpur is the place ~~in which~~ I was born.*
(relative adverb deletion)
- b. *Kuala Lumpur is the place ~~which~~ I was born in.*
(relative pronoun deletion)

Learners might need to distinguish between the two examples above and an explanation to arrive at the patterns upon deletion will help them in the understanding of the patterns used. Deletion is not normal when a relative clause has a relative pronoun replacing the subject of the embedded relative clause.

- * The teacher ~~who~~ will accept the invitation is Mr Ali.

The deletion rule may also be favoured in a context where a number of relative clauses appear in sequence and reduction will likely occur in a relative clause when it is embedded in another relative clause.

- a. I've forgotten the name of the company which gave a quotation which is now being considered by the committee.
- b. I've forgotten the name of the company which gave a quotation which is now *being considered by the committee*.

When the head noun is modified by a relative adjectival clause and the relative pronoun is deleted, then the verb that follows has to be deleted as well in order to arrive at the grammatical pattern whereby the clause now becomes a phrase.

- a. The news that was favourable to the project was announced yesterday.
- b. *The news ~~that~~ was favourable to the project was announced yesterday.
- c. The news ~~that was~~ favourable to the project was announced yesterday.

CONCLUSION

In conclusion, the highlights given in the study about the construction of the relative clause provide insights into the spectrum of problems encountered by the Malay learners of L2 English. The data reinforces earlier findings that extraction from the object position in the upper clause is problematic. It is similarly so with extractions from the various positions in the embedded clause.

Relativisation is part of the resources of English grammar that allows us to realize textual meaning. Lock (1996: 276) emphasizes that in order to move ahead, 'teaching needs to be informed by descriptions of grammar that accurately reflect authentic language and show how grammar is a resource for making and

exchanging meanings in context.' In the L2 situation, much is learnt from the actual processing of the language and the results could lead to improved management of problem areas. It is hoped that L2 learners and instructors will benefit from the description given about the use of relative clauses in an L2 context and language users will be able to practice meaningful communication with an awareness of the problem areas. Subjects certainly need to be given extra practice and be made more aware of how relative clauses are constructed. This is especially urgent in the context of effective and efficient use of the English language when ideas often need to be joined together to achieve fluency and variety in expression. The identification of the problems is seen to be useful as a point of reference in terms of understanding errors made by Malay learners who have elementary command of the English language. As mentioned earlier, this sample mirrors a large population of language users in the Malaysian language environment.

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APPENDIX A

Relative Clause Structures in English

Function of Head noun in main clauses	Function of identical noun in relative clauses			
	Subject	Direct object	Indirect object	Object of a Preposition
Subject	<i>The girl</i> who speaks Tamil is my cousin	<i>The man</i> who you saw is my uncle	<i>The woman</i> that I gave the bag to is here	<i>The place</i> which you talked about is Terengganu
Direct object	I know <i>the girl</i> who speaks Tamil	I know <i>the place</i> that you visited	I gave <i>the woman</i> that you mentioned the book	I know <i>the place</i> which you talked about
Indirect object	We gave <i>the girl</i> who broke the vase a warning	I sent <i>the boy</i> that Mutu saw a letter	I told <i>the boy</i> that you gave the file to a story	I gave <i>the boy</i> that you were talking about the pen
Object of the preposition	I talked with <i>the girl</i> who spoke Tamil	I work for <i>the company</i> that she owns	Mary knows about <i>the man</i> that I gave the present to	I know of <i>the place</i> which Johan wrote about
Predicate noun	Mr Thomas is <i>a headmaster</i> who is very hardworking	Moral studies is <i>a subject</i> that Mr Lee teaches	He is <i>the boy</i> that I gave the money to	Batu Rakit is <i>a place</i> which you would want to go to

APPENDIX B

Grammatical and ungrammatical relative clauses with extractions from various positions

Extraction from main clause - subject position

The boy who speaks Tamil is my nephew *The boy who he speaks Tamil is my nephew.

Extraction from main clause - object position

He likes the composition that you wrote *He likes the composition that you wrote it

Extraction from main clause - prepositional object position

The girl whom you took the chocolate from is crying *The girl whom you took the chocolate from her is crying

Extraction from embedded clause - subject position

The girl who I think likes you comes from a respectable family *The girl who I think why likes you comes from a respectable family

Extraction from embedded clause - object position

The radio which I believe Nora bought is a Sony *The radio which I believe the news Nora bought is a Sony

Extraction from embedded clause - prepositional object position

He the man whom I told you about is over there *The man whom I told you about him is over there

* indicates ungrammatical structures

Preparation of Manuscript

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The manuscript should be typed double spaced on A4 paper with 4cm margins on all sides. It should be limited to 25 pages including tables, illustrations and references.

Title page

The title of the paper, name of author and full address of the institution where the work was carried out should appear on this page. A short title not exceeding 60 characters should be provided for the running headlines.

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