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Procedia - Social and Behavioral Sciences 144 (2014) 203 - 211

5<sup>th</sup> Asia Euro Conference 2014

# Service quality and previous experience as a moderator in determining tourists' satisfaction with rural tourism destinations in Malaysia: A partial least squares approach

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#### **Abstract**

This paper examined tourists' perception of service quality in rural tourism destinations on satisfaction as well as the moderating effect of previous experience on this relationship. Data from 309 valid questionnaires was analyzed using variance-based Partial Least Squares-Structural Equation Modeling (PLS-SEM) method. Perceived service quality has a significant positive influence on tourist satisfaction. Moreover, previous experience moderates the relationship between perceived service quality and satisfaction. The findings of this study offer some interesting implications for practitioners and researchers.

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Peer-review under responsibility of the Scientific Committee of 5AEC2014.

Keywords: Rural Tourism; Malaysia; Service Quality; Tourist Satisfaction; Partial Least Squares; Moderating Effect

#### 1. Introduction

Malaysia's Economic Transformation Programme (ETP) is gearing the nation to become a fully developed nation by 2020 with a bullish target set to achieve 36 million tourist arrivals and RM168 billion (US\$48 billion) in tourism receipt by the targeted period (PEMANDU, 2010). Hence, the quality of all forms of tourism in Malaysia has to achieve the minimum standards of tourist satisfaction if repeat visitation is expected to help the nation achieve its target. As a nation rich with its multicultural and biodiversity, the Malaysian rural tourism sector is growing to

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become an important segment for the tourism industry (Lo, Mohamad, Songan, & Yeo, 2012). Both Peninsular Malaysia and East Malaysia (Borneo Island that consist of Sabah and Sarawak) have one of the best ecotourism destinations in the region (Lifestyle Asia, 2012). Most of these world class destinations are set in the rural landscape of Malaysia.

Rural tourism includes a wide range of attractions and activities that usually take place in agricultural or non-urban settings (Lanea, 1994; Frochot, 2005). Rural tourism is defined by the OECD (as cited in Reichel, Lowengart, & Milman, 2000), as tourism taking place in the countryside. This concept was introduced as a new form of tourism by the Malaysian Government during the Seventh Malaysia Plan period (1996 – 2000). In 2001, the Rural Tourism Master Plan was established which defined rural tourism as:

"tourism that provides opportunities to visitors to visit rural areas and rural attractions, and to experience the culture and heritage of Malaysia, thereby providing socio-economic benefits for local communities...the proximity of many of these rural areas to the hinterland and rainforest also offers visitors an opportunity to extend their holiday and enjoy those unique natural resources" (as cited in Hamzah, 2004, p. 9).

Further to this rural tourism was redefined for the Malaysian context by Nair, Uma Thevi, Sushila Devi, and King (2014). In principal, rural tourism destinations essentially have distinct characteristics - wide-open spaces, low levels of tourism development, and opportunities for visitors to directly experience agricultural and/or natural environments (Irshad, 2010). Hence, rural tourism is growing at a phenomenal rate in Malaysia as the nation continues to attract high tourist arrival and is expected to be a major contributor to the nation's tourism receipt (Siow, Abidin, Nair, & Ramachandran, 2011).

For rural tourism to be sustainable and make a significant contribution to the national agenda, tourists' satisfaction is critical. An assessment of tourists' satisfaction of the rural destinations visited can assist rural tourism players to have a better understanding of tourists' perceptions and focus their efforts to enhance tourists' positive experiences in the rural destinations. The level of satisfaction attained by an individual may influence their future intentions, in terms of revisiting a destination and/or recommending it to other people (Naidoo, Ramseook, & Seegoolam, 2011). In the context of rural tourism, the quality of service offered by rural tourism providers is an essential factor in attracting customers (Rozman et. al, 2009) and as destinations are one of the products of rural tourism, it is necessary to assess the quality of these destinations. Furthermore, it is the customer who decides on whether a service is of quality or not. Hence, tourists' evaluation of service quality is of prime importance (Lopez-Toro, Diaz-Muno, & Perez-Moreno, 2010).

#### 1.1. Service Quality and Tourist Satisfaction

The SERVQUAL model has been extensively used to measure perceived service quality across many service sectors including tourism (Albacete-Saez, Fuentes-Fuentes, & Llorens-Montes, 2007). However, there is criticism regarding its dimensionality (Lopez-Toro et al., 2010) and inadequacy to measure service quality in the tourism sector (Augustyn & Seakhoa-King, 2004). As a result, researchers have either modified the SERVQUAL to suit their research context or developed alternative scales to assess service quality in tourism, including tourist destinations. Narayan, Rajendran, Sai, and Gopalan (2009) developed a scale to measure service quality in tourism in India. The scale developed through a detailed review of literature and exploratory research had ten dimensions, namely core-tourism experience, information, hospitality, fairness of price, hygiene, amenities, value for money, logistics, food and security. Meanwhile, Lopez-Toro et al. (2010) assessed service quality of a sun and beach tourist destination in Spain by modifying the SERVQUAL.

In addition to evaluating service quality, assessing tourists' satisfaction with destination is important because it influences the choice of destination, the decision to return (Huh, Uysal, & McCleary, 2006) and word-of-mouth recommendation (Ozdemir et al., 2012). A destination has been defined as the location of a group of attractions as well as tourists' facilities and services (Kim & Brown, 2012). Consequently, tourist satisfaction with tourism destinations has been extensively investigated (Chen, Lee, Chen, & Huang, 2011; Eusebio & Vieira, 2013; Huh, & Uysal, 2003; Huh et al., 2006; Kim & Brown, 2012; Kozak, 2001; Lo, Songan, Mohamad, & Yeo, 2011). Despite numerous studies on tourist satisfaction with tourism destinations, limited research attention has focused on rural tourism destinations.

The constructs of service quality and tourist satisfaction continue to receive much research attention in the field of tourism (Narayan et. al, 2009) as providing high quality service and ensuring tourist satisfaction are recognized as important factors influencing the success of the tourism industries (Chen et al., 2011). The relationship between service quality and tourist satisfaction in tourist destinations have been extensively researched (Baloglu, Pekcan, Chen, & Santos, 2003; Chen et al., 2011; Lo et al., 2011; Moreira & Campos Duque Dias, 2010; Moutinho, Albayrak, & Caber, 2012; Wang & Qu, 2006). However, very few studies have focused on the link between service quality and tourist satisfaction in rural tourism destinations (Lo et al., 2011; Moreira & Campos Duque Dias, 2010). Lo et al. (2011) examined the impact of service quality on tourist satisfaction in Bario, a rural tourism destination in Malaysia. Prior studies in the tourism literature have commonly found a positive relationship between the two constructs with service quality positively influencing tourist satisfaction (Chen et al., 2011; Lo et al., 2011; Moreira & Campos Duque Dias, 2010). Nevertheless, some other studies (Hernandez-Maestro, Munoz-Gallego, & Santos-Requejo, 2007; Kouthouris & Alexandris, 2005) found no significant relationship between service quality and tourist satisfaction.

# 1.2. Moderating Effect of Previous Experience

The literature also revealed that tourists' previous experience or previous visits in different contexts of tourism were likely to influence their satisfaction and future behavior (Chi, 2012; Frias-Jamilena, Barrio-Garcia, & Lopez-Moreno, 2012; Polo-Pena, Frias-Jamilena & Rodriguez-Molina, 2013). In the context of rural tourism, prior empirical works have investigated the moderating effect of previous experience on satisfaction with rural holiday trips (Frias-Jamilena et al., 2012), perceived quality of rural lodging facilities (Hernandez-Maestro et al., 2007) and loyalty towards rural hospitality enterprises (Polo-Pena et al., 2013). While previous studies have shown that repeat tourists were more likely to be satisfied with their travel experiences (Chi, 2012), the findings of studies on satisfaction with destination between first-time and repeat tourists have been inconsistent. Some studies report that first time or non-repeat tourists have a higher level of satisfaction with a destination than repeat tourists while others report that repeat tourists have a higher level of satisfaction than first timers (Frias-Jamilena et al., 2012). In contrast, few other studies have demonstrated no empirical support for the moderating effect of tourists' previous experience on satisfaction in the context of rural tourism (Frias-Jamilena et al., 2012; Hernandez-Maestro et al., 2007). The aforementioned studies examined the moderating effect of previous experience on the relationship between information sources and satisfaction with rural holiday (Frias-Jamilena et al., 2012), perceived value and satisfaction with rural hospitality enterprises (Polo-Pena et al., 2013), attitude towards rural tourism and perceived quality as well as attitude toward rural tourism and satisfaction (Hernandez-Maestro et al., 2007). None of these studies examined previous experience as a moderator on the relationship between service quality and satisfaction as was done in this study. Previous experience was included as a moderator in the current study based on the viewpoint that the relationship between perceived service quality and satisfaction would differ between first time and repeat

Overall, the review of literature signifies that rural tourism is a little researched area (Frias-Jamilena et al., 2012 and there still is a dearth of empirical studies that focus on service quality and tourist satisfaction in the context of rural tourism. In addition, none of the cited studies on moderation have investigated the moderating effect of tourists' previous experience on the relationship between perceived service quality in rural tourism destinations and tourist satisfaction. Therefore, this study endeavors to address the lacuna and contribute to the literature by examining the relationship between tourists' perceptions of service quality in rural tourism destinations in Malaysia and their satisfaction. In addition, it attempts to analyze the moderating effect of tourists' previous experience on the service quality and tourist satisfaction relationship. Consequently, the following two hypotheses were tested in this study:

- H1: Perceived service quality in rural tourism destinations has a significant positive influence on tourist satisfaction
- H2: Previous experience with rural tourism destinations moderates the influence of perceived service quality on tourist satisfaction.

#### 2. Methodology

To test the proposed hypotheses, a sample of foreign and local tourists above 18 years old who had visited at least one rural tourism destination in Malaysia participated. The purposive sampling method was used to select participants, who would best answer the questionnaire items. Data was collected using self-administered questionnaire-based survey. Although 365 bilingual (English and Malay) questionnaires were distributed and subsequently received, only 309 valid questionnaires were used in the analysis, a response rate of 85%. The service quality construct has the maximum number of predictors in the model including eight formative indicators. Utilizing the Cohen, Cohen, West & Aiken (2003) method a sample of 309 participants is sufficient to achieve the desired statistical power (Hair, Hult, Ringle & Sarstedt, 2013). Data collection was carried out over a period of four months from April 2013- July 2013 by enumerators, in rural tourism destinations in Malaysia. The rural tourism destinations included in this study were Bario, Gopeng, Pangkor, Taman Negara and Royal Belum. Convenient sampling was used to select these destinations as it is regarded the best way to get information quickly and efficiently (Sekaran & Bougie, 2010). The dimensions and items to measure service quality, tourist satisfaction and previous experience were mainly adapted from Narayan et al. (2009), Lopez-Toro et al. (2010) and Kim and Brown (2012) and modified to suit the study context.

Partial Least Squares Structural Equation Modeling (PLS-SEM) method and smartPLS software (Ringle, Wende, & Will, 2005) was utilized to test the research hypotheses. PLS-SEM can be used to assess both reflective (tourist satisfaction) and formative constructs (service quality dimensions) and is appropriate for this study (Henseler, Ringle, & Sinkovics, 2009; Henseler, Wilson, & Westberg, 2011). A model with a second-order construct (service quality) can be analyzed with three different methods: the repeated indicator approach, the two-stage approach, and the hybrid approach (Becker, Klein, & Wetzels, 2012). Due to dissimilar number of indicators for service quality across its lower-order constructs, this research used the two-stage approach to avoid biasing the results and to achieve more reliable results (Becker, et al., 2012; Ringle, Sarstedt, & Straub, 2012). First, the structural model is developed without the high-order construct and PLS algorithm is run in smartPLS. Subsequently, the structural model is developed and service quality dimensions are replaced by their latent variable scores achieved in the first stage. Then, by running PLS algorithm, path coefficients are estimated and by means of bootstrapping with 2000 samples, hypotheses are tested (Becker, et al., 2012).

# 3. Findings

Before testing the structural model and hypotheses, both reflective and formative measurement models are assessed. The details of the measurement properties of tourist satisfaction as a reflective construct are reported in Table 1. Construct reliability (0.89) and Cronbach's alpha (0.82) of tourist satisfaction demonstrates high internal consistency and reliability (Hair, Black, Babin, & Anderson, 2010). The average variance extracted (AVE) of 0.74 indicates the convergent validity of tourist satisfaction is established (Hair et al., 2010). The average shared square variance (ASV) and maximum shared squared variance (MSV) of tourist satisfaction are 0.12 and 0.34 respectively which are less than the AVE. Thus, tourist satisfaction has discriminant validity as well (Hair et al., 2010).

Table 1. Reflective Measurement Model Assessment		
Construct / Measure (Cronbach's alpha (α), Construct Reliability (CR), Average Variance	Outer	t-value
Extracted (AVE), Maximum Shared Squared Variance (MSV), Average Shared Square	Loading	
Variance (ASV))	_	
Tourist Satisfaction (TS) ( $\alpha = 0.82$ , CR = 0.89, AVE = 0.74, MSV = 0.34, ASV = 0.12)		
I have enjoyed my visit(s) to the rural tourism destination(s).	0.85***	16.11
The rural tourism destination(s) offer(s) unique tourists' experiences.	0.88***	19.85
My visit(s) to the rural tourism destination(s) have exceeded my expectations.	0.86***	16.92

<sup>\*, \*\*,</sup> and \*\*\* indicate statistical significance at the 0.05, 0.01, and 0.001 levels respectively. ns indicates not significant at 95% confidence level.

onstruct / Measure	Factor	t-	Outer
onstruct / Medsure	Weights	value	Loadings
Lower-order constructs			
Amenities			
(Range of inter-item correlations= 0.12-0.43; Average inter-item correlation: 0.27; Max. V			
Money exchange or bank facilities within rural tourism destination(s).	0.59 <sup>ns</sup>	1.70	0.81
Access to medical health in case of emergencies in rural tourism destination(s)	0.38 ns	1.05	0.74
Access to police station in case of emergencies in rural tourism destination(s).	0.41 ns	1.29	0.58
Accessibility & Logistics (Inter-item correlations= 0.23; Max. VIF= 1.06)			
	0.62***	4.20	0.70
Accessibility to tourist attractions	0.63***	4.29	0.78
Condition of infrastructure at tourist attraction(s).	0.64***	4.52	0.79
Core Tourism Experience	VIII- 1 (0)		
(Range of inter-item correlations= 0.11-0.51; Average inter-item correlation: 0.35; Max.			
Natural beauty	0.03 <sup>ns</sup>	0.29	0.55
Weather	0.24**	2.45	0.54
Variety of attractions (e.g. museums, historic and heritage sites, caves, et.)	0.23**	2.33	0.55
Richness of cultural heritage	0.26**	2.41	0.71
Closeness to nature	0.22**	2.08	0.61
Scope for excitement/adventure (e.g. trekking, mountaineering, caving, visit to	0.18 ns	1.39	0.61
forest, etc)  Ouiet and peaceful atmosphere	0.00 ns	0.01	0.57
Ambiance for having a relaxed leisure time	0.41***	3.95	0.72
Hygiene	0.41	3.73	0.72
(Range of inter-item correlations= 0.24-0.553; Average inter-item correlation: 0.37; Max.	VIF= 1.52)		
Cleanliness and hygiene at the place of stay	0.50**	2.81	0.83
Cleanliness and hygienic conditions of streets in rural tourism destination(s)	0.28 ns	1.40	0.69
Hygiene level of food	0.52***	3.49	0.75
Information			
(Range of inter-item correlations= 0.20-0.49; Average inter-item correlation: 0.34; Max. V	/IF= 1.52)		
Availability of tourist information centers at tourist attractions.	$0.38^{**}$	2.65	0.70
Availability of tourist information center at place of stay.	$0.26^{\text{ns}}$	1.48	0.63
Availability of tourist information center at airports/towns.	0.15 ns	0.90	0.58
Ease of communicating in a common language that both tourists and the local	$0.60^{***}$	4.81	0.80
community are comfortable with (e.g. English).			
Security	ЛГ— 1 54)		
(Range of inter-item correlations= 0.34-0.57; Average inter-item correlation: 0.42; Max. V Security at the place of stay.	$0.46^{**}$	2.04	0.80
Security at the place of stay.  Security at the tourist attractions/places of visit.	0.46 ns	1.02	0.80
Safety of domestic travel (e.g. flights, trains, buses, rented vehicles, taxis, etc).	0.55**	2.86	0.71
Value for Money	0.55	2.00	0.01
(Range of inter-item correlations= 0.34-0.61; Average inter-item correlation: 0.46; Max. V	/IF= 1.74)		
Price worthiness of accommodation	0.80***	4.09	0.93
Price worthiness of food at the place of stay.	$0.00^{\text{ns}}$	0.02	0.65
Price worthiness of local transport (e.g. taxis, buses, rented vehicles, etc).	$0.39^{\text{ns}}$	1.83	0.66
Hospitality			
(Single Indicator)			
Courtesy of hosts at the homestays.			
Higher-order construct			
Service Quality			
(Range of inter-item correlations= 0.34-0.53; Average inter-item correlation: 0.43; Max.			
IF= 1.72)	O OO IIS	0.04	0.66
Accessibility & Logistics	0.08 <sup>ns</sup> 0.68***	0.84	0.66
Core Tourism Experience	0.68 0.22**	7.18	0.94
Hygiene Information	0.22 0.15 <sup>ns</sup>	1.97 1.58	0.68
	-0.05 ns		0.65
Security Value for Money	0.05 ns	0.43 0.52	053 0.52
		V) Z	0.54

<sup>\*, \*\*,</sup> and \*\*\* indicate statistical significance at the 0.05, 0.01, and 0.001 levels respectively. ns indicates not significant at 95% confidence level.

To assess the measurement model of service quality as a formative construct, the indicators' outer weights and outer loadings as well as the collinearity among indicators of the construct are examined. Indicators with significant outer weights and/or outer loadings greater than 0.5 remain in the model (Hair et al., 2013). Maximum variance inflation factor (VIF) of indicators of all formative constructs is less than 5 as well as inter-correlation among indicators of each construct is less than 0.9. Thus, there is no collinearity among the indicators of service quality (Field, 2013). Table 2 shows the results of the assessment of service quality dimensions. According to the table, only seven formative constructs had significant contributions to forming the service quality construct: Accessibility & Logistics, Core Tourism Experience, Hygiene, Information, Security, Value for Money and Hospitality. Amenities had no significant contribution to forming service quality and was excluded from the model. Core Tourism Experience had the most significant contribution to forming the service quality construct followed by Hygiene.

The results of analyzing the structural model by using PLS method and bootstrapping technique with 2000 samples are reported in Table 3. As shown, service quality has a significant positive effect on tourist satisfaction (standardized estimate = 0.58, p < 0.05). Hence, Hypothesis 1 is supported. The moderating effect of previous experience on the influence of service quality on tourist satisfaction is significant at 95% confidence level (standardized estimate = -0.07, p < 0.05). This indicates that previous experience negatively moderates the positive influence of service quality on tourist satisfaction. In other words, tourists' who have made prior visit(s) to rural tourism destination in Malaysia are less satisfied with the quality of service in these destinations. Hypothesis 2 is also supported. Moreover, the model demonstrated predictive power (R-square) as service quality and previous experience explained 35.13% of the variance in tourist satisfaction.

Path	Coefficient	<i>t</i> -value	Percentile 95% confidence intervals
Tourist Satisfaction (R <sup>2</sup> =35.13%)			
← Service Quality	0.58	13.62***	[0.496; 0.663]
← Previous Experience	0.08	1.90 <sup>ns</sup>	[-0.002; 0.160]
← Service Quality * Previous Experience	-0.07	$2.03^{*}$	[-0.142; -0.003

<sup>\*, \*\*,</sup> and \*\*\* indicate statistical significance at the 0.05, 0.01, and 0.001 levels respectively. ns indicates not significant at 95% confidence level.

### 4. Discussion

The results of this study supported both Hypotheses 1 and 2. The finding that service quality has a significant positive influence on tourist satisfaction (Hypothesis 1) confirms that satisfaction is enhanced by higher perceptions of service quality and is consistent with the service quality and satisfaction relationship that conceptually guided this study. Since service quality is a direct antecedent of satisfaction, its measurement and improvement are a crucial aspect of the management of rural tourism destinations. Additionally, this study showed that service quality is a multidimensional construct and this finding is consistent with the literature (Hernandez-Maestro et al., 2007). These dimensions thus form the integral aspects of the quality of service that should be provided to satisfy tourists' expectations in rural destinations. Further, as Core Tourism Experience and Hygiene were perceived to be the two most important dimensions of service quality, service providers and decision makers of rural tourism destinations should focus on these two factors to enhance customer satisfaction and contribute towards developing a long-term relationship with tourists. Core Tourism Experience reflects tourists' motivations to visit rural tourism destinations and as such their satisfaction would be very much dependent on the quality of experience they enjoy. Tourists travel to rural areas for various reasons such as to escape from the city, relax, to interact with nature, visit cultural and/or religious sites as well as to engage in adventure or nature-based activities (Farmaki, 2012). Therefore it is not surprising that Core Tourism Experience would contribute importantly to service quality. Identifying these reasons would enable rural tourism stakeholders to manipulate the important destination-specific attributes or pull factors that would attract tourists to visit rural tourism destinations in Malaysia. The literature suggests that while push factors influence tourists' decision to travel pull factors influence the selection of a destination (Farmaki, 2012).

The level of hygiene in developing countries lags behind that of developed countries (Narayan et al., 2009). This situation may be more persistent within rural tourism destinations in developing countries where basic infrastructure necessary to maintain an acceptable level of hygiene may be lacking, as is the case in some rural tourism

destinations in Malaysia. The right to enjoy hygienic conditions is not only a basic human right but also a prerequisite to attract tourists. Cleanliness of the accommodation, streets and food are part of the destination-specific attributes that tourists would interact with or experience and would subsequently impact on their satisfaction with these destinations. Undoubtedly then, hygiene is a significant contributor to service quality and maintaining the desired level of sanitation in tourist facilities and physical environment must be given utmost priority by rural tourism service providers and decision makers. Hygiene as a dimension of service quality has also received attention from other researchers (Kozak, 2001; Moutinho et al., 2012).

The finding that tourists' previous experience negatively moderated the positive relationship between service quality and satisfaction (Hypothesis 2) indicates that repeat visitors are less satisfied with the service quality in rural tourism destinations than first time visitors. Tourists with previous experience would have different perceptions of the service quality in these destinations and they are distinct from first timers in terms of the quantity, content and organization of their knowledge (Hernandez-Maestro et al., 2007). Moreover, actual experiences are considered more reliable than information obtained through others as they provide important information for tourists to make decisions pertaining to destination choice (Chi, 2012). It is possible that this experience would result in higher expectations of the quality of service and consequently lead to lower satisfaction unlike first time tourists.

#### 5. Conclusion

This study investigated the influence of service quality and the moderating effect of previous experience on tourist satisfaction in rural tourism destinations in Malaysia, a developing country. The study has contributed to extending knowledge in the field of rural tourism in the context of the developing world. The study findings offer some interesting implications for practitioners and for further research. Firstly, it provides rural tourism service providers and decision makers an insight into rural tourists' expectations and needs. Secondly, as first time and repeat tourists may have different perceptions of service quality, rural tourism service providers and decision makers must develop different marketing strategies and activities tailored to the needs of the two groups. Additionally, implementation of promotional strategies requires an understanding of these two groups of tourists. Thirdly, rural tourism decision makers must allocate resources and develop effective policies towards the management and differentiation of their rural tourism destinations. Only then can a long term relationship be developed with tourists.

This study has certain limitations which constitute opportunities for future research. The conceptual framework focused on the variables that were most relevant to achieving the research objectives. For further research this model can be extended to include other relevant variables such as tourist loyalty. In addition, the moderating effect of other variables such as foreign and domestic tourists, on the relationships between the variables of service quality, tourist satisfaction and loyalty can be investigated. Another limitation which could also be a research opportunity arises from the application of the current model to certain rural tourism destinations in Malaysia due to accessibility and time limitations. This model can be applied to other rural tourism destinations in Malaysia and in other developing countries to verify whether it can be generalized to other populations. Finally, the service quality scale employed in this study has not been used previously in the context of rural tourism destinations. Hence, future similar studies in other developing countries can utilize this scale to assess if it can be generalized.

## Acknowledgements

This study was made possible through research grants received from the Ministry of Higher Education, Malaysia [LRGS grant no: JPT.S (BPKI) 2000/09/01/015Jld.4 (67)].

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