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**To Re-enact or Not to Re-enact?
Investigating the Impacts of First- and Third-Person Interpretation at a
Heritage Tourism Site**

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Heritage Tourism Site**

Abstract

The purpose of this study was to investigate the impacts of first-person street theatre re-enactments versus third-person interpretation at a recreated 1850s gold-rush heritage tourism site. Data collected from 357 visitors following seven different interpretive activities indicated that third-person interpretation produced significantly higher mean respondent ratings than those activities that used first-person interpretation on six of ten cognitive, affective and behavioural indicators. Further scrutiny revealed that third-person interpretation resulted in higher levels of cognitive and affective outcomes for some visitor audiences when compared to first-person interpretation, but that there was no difference between first- and third-person interpretation on most behavioural outcomes. Both types of interpretation may be needed in order to achieve a full range of visitor outcomes. A multivariate analysis of covariance illustrated the potential implication of activity length in determining visitor outcomes; that is, the longer the activity the greater impact of interpretation on measured outcomes. Isolating the effect of type of interpretation versus duration requires further research.

Key words: Heritage Tourism, First-person, Third-person, Interpretation Media, Visitor Outcomes

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Introduction

A key obligation associated with being a custodian of heritage is to interpret and present it to current and future generations (UNESCO, 2010). Toward this end, a number of interpretive methods are used to bring history to life including the use of non-personal or static interpretation (e.g., signs, exhibits, brochures and other publications, audio-visual presentations, artefacts, interactive media) and personal or face-to-face interpretation (e.g., talks, demonstrations, guided walks and tours, and various forms of interaction with costumed staff). Costumed face-to-face interpretation, sometimes called live interpretation (Bicknell & Fisher, 2001; Graft, 2001), broadly speaking, can be divided into two types – those that use a first-person narrative to recreate social and political events in the form of theatrical re-enactments and those that use a third-person narrative in the form of presentations and tours to convey activities and events of the time (Alsford & Parry, 1991; Malcolm-Davies, 2004; Roth, 1998). However, the relative merits of these two approaches with respect to their impacts on visitors are largely unknown (Museum Audience Insight, 2008a) leaving custodians of heritage with difficult decisions about where to focus their interpretive efforts when attempting to present history to modern day audiences.

Research is needed to better understand the relative impacts of first- and third-person interpretation on organisationally-desired visitor outcomes. Previous research has typically examined visitor outcomes in relation to the evaluation of interpretation at a whole heritage site (e.g., Stewart & Kirby, 1998; Van Dijk & Weiler, 2009), and while some has focused on individual interpretive activities (e.g., Knapp & Barrie, 1998), little research has been conducted comparing different types of interpretation. Some exceptions include Lindgren-Streicher & Reich (2007) who examined visitor preferences in relation to interpretive experiences that integrate both digital and physical interpretive experiences at two museums (provided by the original artefacts, computer simulations, and touchable 3D replicas), Madin & Fenton (2004) evaluated guided and un-guided interpretive activities on the Great Barrier Reef in relation to their effectiveness in relation to education about conservation of the Great Barrier Reef. Weiler & Smith (2009), compared the number of exposures to interpretation of visitors at a zoo in order to examine the differential effects on visitor outcomes. Studies of interpretive media and techniques to date have focused on a limited range of outcomes such as cognitive recall (Porter & Howard, 2002) and specific behavioural outcomes (Lackey & Ham, 2003). The present study is informed by findings that the use of a particular type or medium of interpretation often does not account for differences in outcomes, although multiple exposures to interpretation and multiple media have been found to account for higher levels of impact on selected visitor outcomes such as visitor knowledge, feelings, and actions (cognitive, affect, and behaviour) (Madin & Fenton, 2004; Weiler & Smith, 2009). No published studies were found that examined a full range of visitor outcomes associated with first- and third-person methods of interpreting history. As such, the aim of the present research is to compare the visitor outcomes of third-person versus first-person interpretation at an 1850s recreated gold mining town. More precisely, it examines the impacts of third-person presentation of mining practices versus first-person theatrical re-enactments on a range of cognitive, affective and behavioural visitor outcomes. Knowing the relative impacts of these two approaches on organisationally-desired outcomes will aid

custodians of heritage in their decision-making about how history can be presented to visitors.

Literature Review

When visiting heritage tourism sites, visitors expect to encounter on-site interpretation and many consider its role critical in facilitating and evaluating their overall experience (Henderson & Bialeschki, 1995; Morgan, Lin, Chou, & Wu, 2006; Van Dijk & Weiler, 2009). Face-to-face interpretation by costumed interpreters appears to be well accepted and sought-after as a mechanism for addressing this expectation and, potentially, leading to positive visitor outcomes. Indeed, claims have been made that “the majority of visitors to outdoor history museums truly enjoy, and seek out, costumed interpretation” and that “individuals find the narrative of costumed-based interpretation to be a wonderful tool to not only learn about the past, but immerse themselves in it” (Museum Audience Insight, 2008a, p. 1).

The success of costumed interpretation can be evaluated by whether it achieves organisational goals on an input-outcome basis. Although evaluating interpretation based on management inputs (e.g., the time, cost and effort required) is useful, there is growing recognition of the importance of evaluating inputs such as the use of different types of interpretive media in relation to an organization’s broader visitor-based outcomes (Van Dijk & Weiler, 2009; Weiler & Ham, 2010) and several authors have declared a need to explore the relationship between interpretation inputs and outcomes (Weiler & Smith, 2009; Ballantyne, Packer, Hughes & Dierking, 2007; Madin & Fenton, 2004; Stewart, Hayward, Devlin, & Kirby, 1998). Understanding the impacts that different types of interpretation inputs or media may have on visitor outcomes at a heritage site can inform the design of interpretive products that not only enhance the commercial viability of heritage sites, but also contribute to heritage conservation by engendering visitor support by connecting visitors with the site, its stories, and the people of the times..

Inputs

To focus on inputs first, costumed interpretation can be divided into activities that recreate social and political events and those that are used to convey information in relation to activities and events of the interpreted period (Museum Audience Insight, 2008a). Costumed theatre performances can be used to re-enact and present a ‘living history’ (Hunt, 2004) of social events of the recreated era, and for the purpose of the present study are termed first person re-enactments (FPRs). The presenters of these re-creations take on the role of a character and language of the interpreted period and talk to other actors and, in some instances, visitors in the first person.

One limitation associated with FPRs is that the actors are bound to their character roles. Hunt (2004, p.389) claims that “there are always limits to authenticity and realism” as it is difficult to fully recreate the past which in turn may distort visitors’ understanding of the interpreted period. Thus, some have argued that FPRs may pose limitations when trying to elicit visitor-based outcomes, as re-enacting only provides one level of knowledge for visitors without supporting explanation or information, thus limiting its educational value (Light,

1995; 1996). However, others suggest that first-person interpretation is a better way to personalise history and to establish emotional links with visitors when compared to third-person interpretation (Roth, 1998) and some industry-based views of costumed re-enactments are that they are a 'wonderful way to interpret history' (Liljegren, 2002) and that 'the majority does enjoy the first-person interpretation' (Museum Audience Insight, 2008a).

An alternative approach to costumed interpretation involves activities that convey information in relation to activities and events of the interpreted period. For example, practices of the interpreted era may be demonstrated or presented in the third person during presentations and tours. For the purpose of the current research this style of interpretation is termed third-person re-creations/re-enactments (TPRs). TPRs assume a different tone from FPRs in that they attempt to explain practices and events of the interpreted era, in language familiar to the audience. While the interpreter is dressed as a person from the relevant historical period, s/he does not assume a character role and hence maintains the flexibility of two-way communication afforded to most guide–visitor interactions (Roth, 1998; Tivers, 2002). In this sense, TPRs represent a more familiar and mainstream approach to presenting information about the past.

Outcomes

Historical interpretation is important to delivering tourism products because it can engender a connection with and empathy for the people and practices of the historic period (Moscardo, 1999). If done well, it may also engage visitors, increase visitor/customer loyalty and satisfaction, promote public relations, foster positive attitudes toward heritage and heritage preservation, and manage visitors' on-site behaviours (Ham & Weiler, 2007; Knudson, Cable, & Beck 1995; Morgan et al., 2006; Tivers, 2002; Wearing, Archer, Moscardo, & Schweinsberg, 2006). Previous research that has examined visitor-based outcomes associated with interpretation across varying contexts indicates that outcomes can be categorised into three overarching domains: (1) visitor cognition (learning, knowledge acquisition, or information processing), (2) affect (visitor feelings, attitudes or emotions) and (3) behaviour (visitor actions or inactions) (de Rojas & Camarero, 2008; Ham, 1992; Weiler & Ham, 2010; Weiler & Smith, 2009). Although other classification systems exist (e.g., Dierking, Adelman, Ogden, Lehnhardt, Miller & Mellen, 2004; Wearing et al., 2006), there is consistency in the domains identified.

These three foci – cognition, affect and behaviour – provide a framework within which historical interpretation can be evaluated. However, there are few generic evaluation tools that capture key outcomes in these areas. A notable exception is the relatively recently developed instrument by Ham and Weiler (Ham & Weiler, 2006; Weiler & Ham, 2010) in which the authors sought broad heritage tourism industry input to identify and prioritise organisationally-desired cognitive, affective and behavioural outcomes using a group decision making process (the nominal group technique) (Delbecq & Van de Ven, 1971). The consultation and development process, as reported in Weiler & Ham (2010), involved the construction of a set of scales for these outcomes that were then tested using best-practice scale development procedures including stages of reduction, refinement, field-testing and validation.

The multi-item indicators of outcomes included in the heritage interpretation instrument developed by Ham and Weiler (2006) are: engaging visitors to think or elaborate (cognitive), relevance and meaningfulness to visitors (cognitive), impact on world view via empathy (cognitive/affective), visitors' attitudes to heritage conservation (affective), global evaluation of the interpretive experience (affective), and word-of-mouth (WOM) advertising (affective/behavioural). Each of these indicators is measured using 3 to 5 individual items (see Table 1) that require a response on a seven-point semantic differential scale. A semantic differential scale is a bipolar scale with contrasting adjectives at the end of each scale (e.g. Good to Bad). An item used to measure the construct elaboration is "Overall, the presentations and guided activities (interpretation) I attended today..." "did *not* make me think" on one end of the scale to "made me think" on the other. The scale measuring visitors' attitudes to heritage conservation in response to the interpretation included, "made protecting heritage seem *less* important on one end of the scale to "made protecting heritage seem *more* important" at the other. The relevant and meaningful scale included the item, "was relevant to me" at one end of the scale to "was *not* relevant to me" at the other. The visitor's impact on current world view included the item, "did *not* impact on how I see myself" on one end of the scale to "impacted how I see myself" on the other. In order to assess WOM advertising the scale included the item, "...I am inclined to tell other people to visit" on one end of the bipolar scale to "I am inclined to tell people *not* to visit" at the other. Four additional single-item indicators assess mainly behavioural outcomes with commercial implications associated with interpretation; each is measured with a yes/no response: visitors' desire "to participate in additional interpretive activities," "to purchase a memento or souvenir related directly to the site story," "to stay longer," and "to return for repeat visit" (see Table 1). The full instrument is available in Ham and Weiler (2006) and Weiler and Ham (2010).

Although there may be many other criteria and tools by which interpretation can be evaluated, use of this instrument is attractive to both industry and researchers because a) the indicators originated in and were selected as being the outcomes most desired by heritage tourism organisations, b) the scales were developed using best practices, and c) the instrument is sufficiently generic to be useable by all heritage-based interpretation (Weiler & Ham, 2010). It is acknowledged, however, that while heritage tourism attractions and organisations might want all of their interpretive activities to deliver all of these outcomes, they may and indeed should approach their interpretation strategically and collectively, in anticipation that some individual interpretive activities and media may achieve some visitor outcomes but not others. This point is revisited in the discussion and conclusion sections of this paper.

Table 1. Indicators and outcome constructs of the heritage interpretation evaluation instrument

Indicator	No. of items	Type of outcome
Elaboration (provoked to thought)	5	cognitive
Visitors found it relevant and meaningful to their lives	4	cognitive
Impact on current world view via empathy with historic period and people	5	cognitive / affective
Positive attitude toward heritage / heritage preservation	3	affective
Positive global evaluation of interpretation at site	4	affective
Positive word-of-mouth advertising	5	affective / behavioural
Desire to participate in additional interpretive activities	1	affective / behavioural
Desire to purchase a memento or souvenir related directly to the site story	1	affective / behavioural
Desire to stay longer	1	affective / behavioural
Desire to return for repeat visit	1	affective / behavioural

Note. Adapted from Ham & Weiler (2006) and Weiler & Ham (2010).

Expected differences in outcomes between FPRs and TPRs

There are several reasons why differences in visitor outcomes between FPRs and TPRs can be expected. Firstly, there are potential advantages of TPRs over FPRs, such as the ability to use language relevant to the audience and to interact with and respond to the audience in a way that is more consistent with modern interpersonal communication. Moreover, the fact that third person presentations are the norm may mean that visitors have more practice with and feel more comfortable listening and experiencing in this way.

Secondly, research suggests that visitors are more likely to express a preference for TPRs as a form of interpretation at history-based sites. When approximately 5,000 history-museum-going visitors were asked to list their preferences for interpretation from 14 options (multiple answers were allowed) including ‘live re-enactments of the past’ and ‘demonstrations,’ more respondents expressed a preference for the latter than the former (Museum Audience Insight, 2008a).

Thirdly, differences in outcomes between FPRs and TPRs are a logical conclusion emanating from interpretation theory. According to research underpinning the principles of interpretation, good communication is entertaining and relevant (Ham, 1992; Ham & Weiler, 2003). Certainly, costumed interpretation using FPRs affords an opportunity and potential for the experience to be entertaining. Indeed theatrical performance and entertainment are often synonymous. On the other hand, TPR interpreters may have more flexibility to customise their presentations to make them relevant to visitors than do FPR interpreters. According to Ham (1992), relevant interpretation is that which is meaningful (connects with what people already know) and personal (connects with what people already care about). Generally, people find it easier to pay attention to, and process information about, things they know and care about (Holbrook, Berent, Krosnick, Visser, & Boninger, 2005) and TPRs probably have more opportunity to do this than FPRs. In contrast, FPRs may be quite alienating and some open ended comments from research undertaken by Museum Audience Insight seem to reflect this: “I visited a museum where everyone stayed ‘in-period,’ but I didn’t really enjoy it. It stunted any exchange with the interpreters” (Museum Audience Insight, 2008a, p1).

Thus, despite Roth’s (1998) assertion noted earlier that FPRs are a better way to interpret history, there is some research to suggest that TPRs might perform better on some outcomes. The aim of this study is to examine the relative impact of these two interpretive approaches with respect to the selected visitor outcomes identified by industry as being pertinent to face-to-face interpretation-based activities (cf. Weiler & Ham, 2010) included in Table 1.

Study site

Sovereign Hill is operated by Sovereign Hill Museums Association and is one of Australia's major tourist attractions, attracting almost half a million visitors per year. Located 110 km northwest of Melbourne in the regional urban centre of Ballarat, the trip to Sovereign Hill from Melbourne's Central Business District takes approximately 90 minutes one-way by coach or rail and slightly less time by car. Known for its commitment to authentically depicting life on the goldfields, Sovereign Hill uses interpretation to reconstruct aspects of the 1850s gold-rush period and to communicate information in relation to mining on the goldfields, and how social and political events related to that period have informed Australian politics, culture and society (Van Dijk & Weiler, 2009).

A range of interpretive activities, including costumed and interpretive staff, street theatre, demonstrations, and underground mine tours are used to impact visitors in order to enhance organisational performance. The seven interpretive activities (termed activations) at Sovereign Hill that are the subjects of the present study are: The Temperance Preacher, Lola Montez, The Newlyweds, and The Crimean Red Coats (all street theatre-based FPRs); and The Voltaic Battery, The Quartz Mine Tour, and The Gold Pour (all tour-based TPRs). In all of the FPRs (typically between 5-20 minutes in length) the actors use the language of the historical period appropriate to the social class in which the characters belong. The only interaction between actors and visitors is when other costumed staff are available to play onlookers to make statements to visitors in relation to the side they take and to communicate that this would not have been an uncommon event in the period. An example of an FPR is the Newlyweds FPR. The FPR is a 5-10 minute portrayal of an altercation between an 1850s man of 'substance' and a newly married couple about to enter a jewellery shop to purchase a ring. Both (members of the couple?) have been celebrating through the night and are still displaying the effects of alcohol. The aim of this activation is to portray the conflict between the established elite classes and the financially and socially upwardly mobile miners. The conflict takes place between a miner, his wife and a 'gentleman', all in period costumes that represent their station in life on the goldfields.

An example of a TPR (typically between 15-45 minutes in length) is the Voltaic Battery activation. This 15-20 minute presentation involves the re-enactment of the testing of a device lighting an explosive (black powder) using an electric current from a voltaic battery (an early form of an un-rechargeable battery). The guide addresses the audience directly and at a point in time calls for a volunteer. The guide engages the audience using humorous gender-based undertones and by referring to modern technology (batteries, electricity, and electrical wire) that is common in the present day in an effort to make the interpretation relevant to the audience.

Method

The aim of the present research is to determine how interpretation based on third-person presentation of mining practices (TPRs) performs in comparison to interpretation using first-person theatrical re-enactments (FPRs) in eliciting cognitive, affective and

behavioural visitor outcomes at Sovereign Hill. Visitors were surveyed at Sovereign Hill over a seven day period. Data were collected immediately following the completion of each of the seven interpretive activities. Visitors were approached at the conclusion of the TPR or FPR to minimise sampling bias (Bryman & Bell, 2003). The data collectors systematically selected every *nth* person at the conclusion of each presentation/tour (Nicholson & Pearce, 2001; Tharenou, Donohue, & Cooper, 2007). The Weiler and Ham (2010) instrument was used to capture visitor outcomes with the introduction to the instrument slightly modified to direct respondents' attention to the impact of the specific interpretive activity on the outcomes rather than their entire interpretive experience. Dispersing visitors were invited to complete the questionnaire, which included 30 questions measuring the ten indicators of visitor-based interpretive outcomes as presented in Table 1. In addition, a number of socio-demographic questions were included to ascertain the representativeness of the sample. The questionnaire took approximately 5-10 minutes for a visitor to complete.

Approximately 400 visitors were approached to complete the survey. After cleaning the data and eliminating unusable responses, there were 357 useable responses (a response rate of 89%). The most common explanations for refusing to complete the survey instrument were: 'Not enough time', 'Didn't see or hear the activation/presentation' and 'Just came in at the end of the activation/presentation'.

The profile of respondents was not dissimilar to the Sovereign Hill visitor profile for both FPRs and TPRs. Respondents were mainly from Australia (67%) with the highest number of overseas visitors being from U.K. (13%). There were 48% male and 51% female respondents (1% missing data), and 63% of visitors were between the ages of 35 – 55 years. Forty percent were first-time visitors to Sovereign Hill, 33% were second-time visitors and 13% third-time visitors. Based on Sovereign Hill marketing research, most of these previous visits would have occurred many years earlier, either as part of a school visit or as children visiting with their families.

Results

In order to determine the differences in outcomes elicited between the two categories of interpretation, a Multivariate Analysis of Variance (MANOVA) was conducted. A MANOVA is appropriate for research that involves more than one dependent variable and controls for rejecting hypothesis during the analysis that should have been accepted (Type 1 Error). Mean scores for each of the six multi-item indicators (Table 1) were calculated. The multi-item variables were visually and statistically checked for skewness and kurtosis and were all within acceptable levels. The reliability of the multi-item indicators was tested and ranged from $\alpha = .68$ to $\alpha = .84$. Scores for the remaining four single-item indicators (last 4 items in Table 1) were obtained by calculating the percentage of 'yes' responses.

In order to determine if there was any difference in visitor outcomes between types of interpretation, visitor responses were allocated as either a TPR or FPR based on which interpretive activity they attended (see Table 2).

Table 2. Frequency of responses for each interpretive activity

Interpretive activity (Activation)	Frequency	Percent
<i>Third-person re-creation/re-enactments</i>		
Quartz mine tour	91	25
Gold Pour	65	18
Voltaic Battery	40	11
Subtotal	196	55
<i>First-person re-enactments</i>		
Lola Montez	41	11
Red Coats	78	22
Newlyweds	32	9
Preacher	10	3
Subtotal	161	45
Total	357	100

Before conducting the primary analysis with the MANOVA, several tests were performed to determine if the data set met the necessary assumptions (Pallant, 2009). Scatterplot matrices did not reveal any obvious indication of a violation of non-linearity of the data and each cell met or exceeded the necessary 30 cases required to avoid violations of normality or equality of variance. However, six cases were considered outliers (data outside the normal distribution) as they exceeded the critical Mahalanobis distance value (22.46) for a data set with six continuous dependent variables and were removed from the analysis (Pallant, 2009). In addition, the dependent variable ‘global evaluation of interpretation’ violated the assumption of equality of variance ($p < .05$). To compensate, the univariate F-test level of significance was set at 0.01 for this variable (cf. Tabachnick & Fidell, 2007).

After the initial examination of the data, a one-way between-subjects MANOVA was conducted to investigate differences in the multi-item measures of outcomes associated with FPRs and TPRs. To determine if any difference in visitor outcomes exists between FPRs and TPRs they were first compared against the combined scores of the dependent variables. The analysis determined that there was a statistically significant difference between FPRs and TPRs on the combined scores of the dependent variables ($F(6, 345) = 11.89, p < .001$). When the results for the dependent variables were considered separately, all outcomes except one were associated with significantly higher scores for TPRs than FPRs (see Table 3). The only variable that failed to reach statistical significance was WOM advertising ($F(1, 350) = 1.23, p = .269$).

Table 3. Results of a MANOVA for the six multi-item indicators with the level of interaction

Dependent Variable	Means *		F	p	Partial eta squared
	TPRs	FPRs			
Impact on current world view via empathy	4.66	3.99	22.75	.000	.061
Elaboration (provoked to thought)	5.65	4.96	36.12	.000	.094
Positive attitude toward heritage / heritage preservation	5.67	5.31	9.11	.003	.025
Positive global evaluation of interpretation at site	6.46	5.86	51.10	.000	.127
Positive word-of-mouth advertising	6.44	6.35	1.23	.269	.003
Visitors found it relevant and meaningful to their lives	5.07	4.48	22.04	.000	.059

* on a scale of 1 to 7

A second set of analyses was undertaken to determine the relative impact of TPRs against FPRs on the single-item measures of behavioural outcomes. For the four nominal single-item variables, each of which measures a respondent's attitude towards a behaviour, the percentage of 'yes' responses is used to indicate respondents' scores. Table 4 shows a cross-tabulation (a test of independence) of percentage of 'yes' responses against the difference in FPRs and TPRs. While all percentages of 'yes' responses were greater for TPRs, only *return for a repeat visit* was significant at the 0.05 level (see Table 4).

Table 4. Cross-tabulation comparing percentage of 'yes' responses against FPRs and TPRs for single-item interpretation outcomes.

Outcome	TPRs	FPRs	p
Desire to participate in additional interpretive activities	96	91	0.11
Desire to purchase a memento or souvenir	58	48	0.07
Desire to stay longer	89	82	0.09
Desire to return for repeat visit	84	74	0.02

A final MANOVA was conducted in order to assess the impact that duration of the interpretation on visitor outcomes to control for activity duration and to rule out the possibility that the differences between FPRs and TPRs were due to the type of interpretive activity and not its length. The arbitrary allocation of time to the categories of interpretation was based on an 'average' amount of time the activity is designed to take to complete. Four categories were created based on the estimated duration of activities (5-10, 10-15, 15-20, and 40-45 minutes). With the inclusion of duration there remained a statistically significant

difference between FPRs and TPRs on the combined dependent variables ($F(6, 346) = 4.48, p < .001$). When the results for the dependent variables were considered separately, only two indicators of visitor outcomes remained statistically significantly different. These were positive attitude toward heritage and heritage preservation ($F(1, 351) = 5.49, p = .02$, partial eta squared = .015), and positive global evaluation of interpretation at site ($F(1, 351) = 5.66, p = .018$, partial eta squared = .016).

Discussion

The aim of the study was to compare TPRs and FPRs in their relative ability to achieve organisationally-desired visitor outcomes. This research did not set out to determine if FPRs or TPRs performed poorly in having any meaningful impact on visitor outcomes, but examined the relative value of TPRs and FPRs in achieving selected interpretation-based outcomes. It should be noted that, based on the mean scores, no interpretive activity was rated below 4 (on a 1-7 scale) on any of the semantic differential multi-item indicators, and most were well above this. The percentages of visitors who gave a positive evaluation (yes) were similarly high, with the exception of “desire to purchase a memento” which has also scored low in other applications of the instrument (Van Dijk, Smith & Cooper, 2011; Weiler & Smith, 2009) However, though at times statistically significant, the differences between FPRs and TPRs in relation to these outcomes could be considered at times modest.

The results of a MANOVA and cross tabulation support the superior effectiveness of TPRs for all the multi-item indicators except for WOM advertising. A possible explanation for the lack of any significant difference for the WOM advertising is that though TPRs were more effective in generating cognitive and affective outcomes, the differences do not necessarily mean that the visitors did not enjoy FPRs or would be unwilling to tell others about their experiences. In fact, this indicator received the highest mean scores across both TPRs and FPRs possibly indicating a ceiling effect in the FPR condition that there was no room for improvement in the case of TPRs. Interestingly, differences between outcomes associated with TPRs and FPRs were not as apparent on the four single-item behavioural tool kit measures. These four indicators are predominantly behavioural indicators and the non-significant results indicate, for three of the outcomes, a lack of association between the type of experience and behavioural outcomes. This may also explain the finding for the multi-item indicator WOM advertising, another mainly behavioural outcome. In sum, the results suggest that TPRs tend to perform better on cognitive and affective outcomes but their association with behavioural outcomes is relatively equal to that of FPRs.

The results associated with this study suggest that while first person social re-enactments may present powerful imagery in depicting social norms of an historical period (Liljegren, 2002; Tivers, 2002), they may be less effective if used in isolation to enhance cognitive and affective outcomes, such as visitor evaluations in relation to the interpretation and attitude change. However, apart from visitors’ desire to return for a visit to the site, both FPRs and TPRs perform equally. The best approach may be for heritage tourism sites to employ a suite of interpretive activities that collectively maintain historical authenticity (often important when designing products that interpret historical periods) while addressing

the commercial realities they may confront. In doing so, heritage sites should recognise that some forms of interpretation will lead to effective outcomes in some areas whereas other forms of interpretation are effective in other areas. Prioritising outcomes may inform decisions about where interpretive efforts are concentrated (e.g., TPRs are associated with positive cognitive and affective outcomes).

Due to the complex communication environment in which interpretation is delivered, isolating the effects of one communication medium from another in a real-time, real-world field-based study of this nature is not easy. Visitors cannot be randomly assigned to experimental groups, nor can every variable that might have impacted visitor-based outcomes be controlled or even measured. For example, this study did not focus on the influence of variations in audience, interpretive personnel and environmental variables such as the weather. Indeed, it can be argued that each interpretive activity, particularly if delivered face-to-face, has a unique set of characteristics including the location on site, the time of day it is delivered, its length, and the specific content and quality of the delivery on the day. The results confirmed that duration was a potential factor, and that isolating the effect of type of interpretation versus the duration of interpretation requires further research. There are many other considerations that inform decisions about the selection of interpretive media, approaches and styles (e.g., the audience, the resources of the organisation, and the constraints of the site). As these are beyond the scope of the present study, readers are encouraged to engage with the wealth of interpretive literature already published to ascertain their relative strengths and limitations in various settings. For a comprehensive bibliography of resources, see Brown and Lee (2003) or the Visitor Studies Association's searchable online bibliography (<http://www.visitorstudiesarchives.org/bibliography.php>).

Other limitations associated with the design of the present research include a limited number of interpretive activities, the relatively short data collection period and the reliance on a single on-site self-report instrument for measuring outcomes. The relative merits and limitations of using visitor self-reporting of outcomes as opposed to, for example, factual recall or pre-post measures of knowledge and attitudes are discussed elsewhere (Weiler & Ham, 2010). What this study did indicate was that presentation and tour-based interpretation (TPRs) appear more effective in influencing visitors to think about the interpreted material (social, political implications) and feel more positive about their experience (satisfaction, enjoyment, conserving the site). From an interpretive planning perspective, the desired outcomes of interpretation provide a starting point for developing interpretive messages and content, as well as for selecting interpretive media. As such, the results of this study suggest that first person social re-enactments need to be supplemented by third-person presentations and tour-based interpretation in order to achieve a full range of visitor outcomes.

Conclusion

The aim of the current research was to compare the performance of two types of interpretation (FPRs and TPRs) in eliciting a range of visitor cognitive, affective and behavioural outcomes at a single heritage tourism site. The results of a MANOVA and cross-tabulation indicated that TPRs outperformed FPRs on most visitor outcomes but not WOM advertising and some other behavioural outcomes. Whilst presentation and tour-based

interpretation (TPRs) appear more effective in influencing visitors to think about the interpreted material (and feel more positive about their experience, both FPRs and TPRs were associated with high levels of desire to undertake additional interpretive experiences, spend more time at the site as well as return for additional visits. A MANCOVA illustrated the potential implication of activity length in determining visitor outcomes associated with interpretation media and, therefore, isolating the effect of type of interpretation versus duration requires further research.

In conclusion, this study does not provide a blueprint for interpretive media selection and indeed points to many avenues for further research. In this study, the interpretation was categorised as being first or third person; future research could develop a more precise measure of the type and style of interpretation. Isolating the effects of other 'input' variables could also be attempted, for example, the extent to which visitor engagement and other measures of 'quality' impact the outcomes of different approaches. Other input and outcome variables important to organisations such as the historical authenticity of the interpretation, how interpretive media impact different types of visitors, and the commercial benefits of alternative interpretive approaches would be fruitful topics for further research.

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