UNINTELLIGIBILITY OF TOKENS IN VIRTUAL TOURISM

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ABSTRACT

Tourism has been studied in three historical contexts: Pre-modern era, which has had a religious purpose and a narrative genre-based research approach; Modern era, in which tourism becomes an industry, with emphasis on the same role in a survey-based research; and post-modern era, with emphasis on socio-cultural, IT-based contexts and interdisciplinary role of scientific approach.

E-travel implies locomotion in cyberspace and its technology has initially been associated with the computer reservations system (CRS) of the airlines industry, but now it is used more inclusively, incorporating the broader tourism sector as well as its subset. While travel technology includes the computer reservations system, it also represents a much broader range of applications, in fact increasingly so. Travel technology includes virtual tourism in the form of virtual tour applications of Information Technology (IT), or Information and Communications Technology (ICT), in travel, tourism and hospitality industry.

E-tourism, as an interdisciplinary field of study incorporating management, IT/ICT, sociolinguistics… has recently been used as a vehicle to take tourists to far distance places and to provide them a chance to enjoy visiting historical sites via cybernetic links, descriptive statements or panoramic virtual photos. The present study has shed some light on the efficacy of such virtual tourism in conveying culture-specific elements, labelled tokens. To that end, a website- Maryam virtual tourism- has been designed to introduce the aforementioned aspects of Shiraz, Iran, in the site with all the possible wares used to that end. A survey was performed on certain candidates, basically specialists in the field and outstanding tourists, familiar with cultural dynamics of Shiraz. They have been identified and put into the databases, after being consulted. The technique has been on line questionnaire as well as far distances text-based interviews. Data elicitation has taken the researcher a six-month time. Results are statistically significant enough to prove the hypothesis that tokens cannot be simply rendered via the present cybernetic techniques interactively in a personalized web designs, software and web-based instrumental effects such as 3D scenes, or simulation platforms like WebGIS. This paper points to the fact that there is no mature platform for introducing cultural token elements via virtual tour system, at present. Therefore, it is necessary to combine the application of cyber glasses, a workable definition of ontologism in semantic web designs & WebGIS with interdisciplinary tokens-familiar technology to develop a specific virtual simulation platform for tourism with an aim of making cultural token elements intelligible.

Keywords: Unintelligibility, tokens, interactivity, personalized web design, post-modern era

INTRODUCTION

The Internet in the late 1990s has transformed operational and strategic practices dramatically in tourism (Buhalis, 2003; Buhalis & Law, 2008). Virtual tourism or e-tourism are supposed to help us rely on our five senses to explore objects and more, like the one experienced in real

life situation. To many, e-tourism has remained an attractive alternative to the real object. Hence, if one cannot pay a visit to historical sites of a city, let's say Shiraz, Iran, the e-tourism seems to provide that proxy to furnish the layout and collections, experienced in that site. Many have regarded the concept ubiquitous; the term is said to contain no more than images, and even 3Ds with object-based texts with little level of technically sensory-immersing interactivity, which is focal to the experience of a virtual tour. According to Suler, (2003): "cyber space environments fall shortly of the dimensions of smell and touch." But ICTs include not only the hardware and software required but also the groupware, netware and the intellectual capacity (humanware) to develop, program and maintain equipment (Buhalis, 2003)

If key words are clearly defined, then one can reach to the final decision in any research studies and the present one is not an exception. First we need to define what tourism, in general, means and what the major purpose is. According to Buhalis, (2008) and based on a definition introduced by WTO – World Tourism Organization - tourism is an interrelated network of tourists and their needs to take a trip or to a travel just for fun, at least for a short period of time; and to visit historical sites. In Beldona's terminology (2006), the trip is neither on economic grounds nor for money making excuses. In this trip, the tourist is accompanied by a tour guide, who has received special training to pave the path just to take the tourist to specified historical places. This type tour & travel service is based on a traditional view point. In such a standpoint, the tourist is not expected to receive a deep understanding of events, happenings or the ratioale behind those already defined historical sites. He will have a naive understanding of the beauties of the trip. (Cooper, et al, 1997)

In its modern sense, tousim has received an interdisciplinary, broad sense, in which it has interconnected with certain other disciplines such as: management, marketing, and IT, which is the last, not the least. According to Suarez Alvarez, (2007), Internet has received an increasingly priority to that end to facilitate flight booking, hotel reservation, background knowledge and road maps to reduce the double burdens of the trip.

Soo Hyun Jun's Contemporary Tourism Review (2011) enumerates the effect of internet boom on the industry. In the Supply section, he focuses on advantages such as: eAirlines, eHospitality, eTour operators, eTravel agencies, eDestinations, which altogether enable users to access information rapidly via the domain specific search engines and meta-search engines and portals such as Trip Advisor, multimedia sharing such as Panoramio.com, and blogs, which create accessible content that increase the level of information available on a global basis. But experiences with the World Wide Web have already shown us that designing the interface to a practically limitless information space is very difficult.

Atkinson, et al, (1997) have referred to alternative tourism – e-tourim – whose key elements are cyberspace, hypertexts, hyperlinks, 3Ds, web browsing, videos, panoramic facilities,...

Many 3D virtual environments (e.g., 3D Web sites) do not offer sufficient assistance to (especially novice) users in navigating the virtual environment, find objects/places of interests, and learn how to interact with them.

The rationale behind e-tourism has been a multidimensional one, chief among which are security measures, e- visas, e-hotel, transportation, flight reservations, lower payments and higher entertainment standards, e-government, global village, ICT, information age, knowledge sharing,....(Suárez Álvarez, 2007) In short, e- tourism has altered _a_ tourist concept to _the_ tourist one. (María Díaz Martin, R.Vázquez Casielles, 2007)

Hence, a virtual tour is a simulation of an existing location, usually composed of a sequence of video images. They also may use other multimedia elements such as sound effects, music,

narration, and text. The phrase "virtual tour" is often used to describe a variety of video and photographic-based media. Panorama indicates an unbroken view, since a panorama can be either a series of photographs or panning video footage. However, the phrases "panoramic tour" and "virtual tour" have mostly been associated with virtual tours, created the use of still cameras. Such virtual tours are made up of a number of shots taken from a single vantage point. The camera and lens are rotated around what is referred to as a nodal point (the exact point at the back of the lens where the light converges).

Williams & Hobson, 1995, have introduced certain idealized paradigms and parameters to that end:

1. *The Web services technology*, which are application programming interfaces, hosting the requested services with emphasis on SOAP – simple object access protocol.

2. *The semantic Web*, a technology for the extension of the current Web to a human-readable one.

3. *Ontologies for Tourism*, which describes the domain of tourism and it focuses on accommodation and activities. (Prantner, 2004)

4. *Intelligent traveller software agents*. They assist travellers in finding sources of tourism products and services as well as documenting and archiving them.

5. *Dynamic packaging systems,* enabling consumers to build their own package of flights, accommodation, and a hire car instead of a pre-defined package.

6. *Recommender systems,* developed to assist the tourists' selection process & preferences based on profiles.

7. *Tour guides and mobile tourism guides.* Audio recorded guidebooks to "guide" viewers through a museum exhibition by providing background, context, and information on the works included.

8. *Location based services for Tourism.* A research–based interface for the tourists' need analysis to supply transportation, maps, tour information, and sites of interest.

9. *Web intelligence and Intelligent Wireless Web (IWW)* to explore the practical impacts of Artificial Intelligence (AI) and advanced information technology on the next generation of Web-empowered products, systems, services, and activities.

10. *Ambient intelligence:* the convergence of ubiquitous computing and communication, and intelligent user-friendly, embedded, personalized, adaptive, and anticipatory interfaces, accessible for everybody, anywhere, at any time.

11. *Context aware computing,* which is the use of environmental characteristics such as the user's location, time, profile, identity and activity to inform the computing device so that it may provide information to the user that is relevant to the current context.

12. *Ubiquitous computing technologies.* They rely on realisation of the ubiquitous computing, including sensors, wireless and wired communications, memory, processor architectures, software technologies and communication systems such as mobile phones, Internet and WWW (Ailisto *et al*., 2003).

13. *Profiling technologies*, which allow delivery of personalised information to users, based on their profile and device capabilities.

14. *Wireless sensor networks,* developed to promise a much wider range of applications for low cost, low power, and multifunctional sensor nodes, capable of sensing, data

processing, networking with other sensors and data communication to external users of tourism processes. (Akyildiz *et al.*, 2002).

15. *Web usage mining,* which can employ data mining techniques to analyze search logs or other activity logs to find interesting tourist patterns, answers to research questions, concerning the tourists' age, ethnicity, educational attainment, annual income, country of origin, and the tourists' interest in tourism destinations or specific e-Tourism services.

16. *Virtual tour and virtual reality,* which affords access into a controlled environment, but can never become a complete substitute for tourist experience, because it is unable to replace the feeling of being in nature and seeing, hearing, feeling, and breathing an environment that is real (Williams & Hobson, 1995).

To date, there has been only limited research into tourism website evaluation, and that using the previously mentioned approaches has achieved only a moderate degree of success. Although involving academic researchers in the process can ensure the validity and reliability of the instruments, researchers and their research assistants have limited experience in online purchasing.

However, all these methical and methodological introspective-driven principles should be put into effect to raise consciousness to an interactive-based representation of objects in cyber. Objects can be represented in three forms or platforms: Containers, Tools and tokens. It is called a *token*, if the digital information associated with the object is reflected in the physical properties of the token in some way, thus making the object more closely tied to the information it represents. Tokens – culture specific elements – rather than types, which are typologies in any type of communication is defined in the online edition of the Merriam-Webster Collegiate. Dictionary includes:

1. an outward sign or expression <his tears were tokens of his grief>
2. a SYMBOL, EMBLEM <a white flag is a token of surrender> b : an instance of a linguistic expression
3. a distinguishing feature : CHARACTERISTIC
4. a SOUVENIR, KEEPSAKE b : a small part representing the whole:

INDICATION <this is only a token of what we hope to accomplish> c : something given or shown as a guarantee (as of authority, right, or identity)

In Holmquist's (2012) Token-Based Access to Digital Information, token is defined as a system where a physical object (token) is used to access some digital information that is stored outside the object, and where the physical representation in some way reflects the nature of the digital information it is associated with. Hence, tokens in human-computer interaction will trigger the display of information that is digitally stored outside the token in some way.

The hypotheses were: 1- e- tourism does not have the same functional value like the traditional one; 2- cultural tokens cannot be communicated via present cyber space; 3- the present HTML web design cannot render perfectly ontologies of an ideal semantic web; 4- ontologies should be redefined in an interdisciplinary, interactive, hermeneutics-based FOAF web design; 5- Low IT literacy of tourists and tourism experts is a hindrance to that end.

To test the hypotheses, triangulations approach- namely: descriptive, exploratory and questionnaire/interview-based survey research methods were favoured subsequently.

To that end, the present research study has concentrated on the unintelligibility of tokens via the present e-tourism models of speculation. Hence, a website, maryamvirtualtourism.com,

was developed. All possible hypertexts, hyperlinks, modules, 3Ds, panoramic pictures and possible web-based tasks were imported to that website.

METHODOLOGY

The study intends to measure the efficacy of the present platforms in introducing cultural dynamics and tokens via cyber tour systems.

Design: 28 items in the on line questionnaire were based on the stratified model of Kothari, (2004), in a split-half binary procedure; 4 to 6 items were included for each hypothesis.

Participants: Tourism research academics and all travellers, familiar with Shiraz touism potentials, postgraduate candidates, Shiraz tokens familiar skill full tour managers, identified, invited and put into our databases.

PROCEDURES

Candidates were screened and online questionnaire was created based on the inventory of 30 specific characteristics and items grouped in 5 categories. A five-point Likert scale was used to measure the level of importance of each highway map feature/item with ''1'' denoting not important and ''5'' – very important. The survey instrument was linked with maryam's virtual tourism website of the author. The software allowed registering responses and the analysis of primary data (mean, variance, standard deviation). It also recorded each opening of the survey link providing the study with information about the date of opening the survey and the time spent in completing the questionnaire. Candidates were also invited to forward their readiness for an interview via Skype. Metatexts, developed to that end were modified by some statisticians who were among academicians.

The descriptive mode helps the researchers move from certainty to describe tokens, the hypothesis and pros/ cons facets of the agenda; the exploratory design was also used to move from uncertainty to certainty. References were three trained judges, skilful in the task. The candidates selected for the survey were 68 outstanding experts- basically University professors and IT literate former tourists, who have a word in the comparative study of real versus virtual travelling to Shiraz, the Iranian centre of tourism industry, based on databases developed to that end.

Data elicitation was based on questionnaire, preceded by the txt/voice interview via the chat rooms. All the statements focused on interactivity of such a website to communicate tokens. Thirty of the samples were selected, based on their responsiveness and exactness of the responses. The sieving process was based on former models of data collection, and stratified sampling items in the design of questionnaire, formerly introduced by Kothari, 2004.

The qualitative data from completed questionnaire were converted into numerical matrices and they were analyzed. The analysis proves that 93% of the candidates have a clear understanding that tokens cannot be communicated via such a usual mode of e-tourism; but 67% of them have learned the exact problem of communicating token elements. Results taken from corpora analysis confirm a basic need for 69% of the candidates through maturation process in learning how to bring about the change to that end.

RESULTS

Results were put into effects matrices and then reanalyzed. The Φ correlation coefficient of 0.83 is supportive of the positive relationship between Data, collected through questionnaire and those of the oral interview from the same respondents to the questionnaire. Both of the data were put into categorical scale.

The t-test was performed on two means: one was the mean score, derived from the first 14 items- split-half questionnaire and the second one was based on the means, in the second half- 14 items, to test the internal reliability, generalizability and viability of the instrument. This makes the mean difference a quantitative one. The results appear as follow:

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
mean	30	2.7202	.37867	.06914

One-Sample Test

	Test Value = 2.5					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
mean	3.186	29	.003	.22024	.0788	.3616

DISCUSSION

The t= 3.186, with a df= 29, when μ=2.5 , p-value=.003 (p-value<.05) seems to suggest naively that the respondents, strongly, favour the hypothesis that e-tourism in its present status quo cannot communicate cultural tokens to the users.

CONCLUSION

The present study seems to highlight the hidden message that the present platforms, tools, gadgets and applications are not mature enough to communicate cultural tokens, which were identified as the key element in the interactive tourism. One can simply learn from the specialists interviewed that without a pluralistic conception, tourism, especially in cyber space, is like playing a game. Hence, far distance visiting of the historical sites without having a memorial photo was reported to be meaningless. Cyber glasses can solve this problem. One can easily draw a conclusion that methodically and methodologically these idealized musts and mustnots, derived from experts via their oral interviews, will be helpful under the following conditions:

1. cyber glass be included: When the user puts on a cyber glass, all these potentialialites will be available to the tourist in cyber space: a)- he can video record sites and clues; b)- signals will guide the tourist in that space; c)- text to voice & voice to text convertor will help the tourist really interact – In Susan Gass terminology (2002), full interaction is satisfied when all its parts: i. e. Input / interaction / recast / attention / output are subsequently performed – d)- GPS, easy e-mailing, and real life communication are other potentials in cyber glass, based on data, released by Babak Parvizi, (2012)

2. Skype as a means of video conferencing be included in the cyber websites, whose scripts will be a workable scheme under certain conditions.

3. Semantic webs & ontologies, which are the corner stone of the present problems in cyberspace, are redefined. If hermeneutics is accepted as the dominant rule in writing new semantic algorithms, then such a change will lead to promising future in e-tourism.

All the foresaid suggestions will be actualized when WINDOWS, as the ......system is replaced with ANDROID or JAVA. Because they altogether will present a workable scheme to communicate tokens in the cyber space.

HTML, the present cyber language should be replaced with the newly invented language known as FOAF (Friend Of a Friend); this language is able to communicative connotative meanings, feelings and sensations; it also provides a chance for ten thousands of users to communicate important points in their personal lives, their personalized favours and disfavours simultaneously in a socio-semantic cyber network interactively.

This study lends support to the uselessness of the present conditions of websites and weblogs in tourism industry.

Such surveys have been both praised and deeply criticized. Many web-based studies use surveys because of the convenience, low-cost and time efficiency. However, there are methodological issues related to web-based survey such as nature of the sample, response rate, privacy and confidentially, etc. that may affect the validity of the findings (Duffy, 2002 in Steven F. Illum a, 2010). The present study adds to the finding of Illium that questionnaire/ interview-based survey cannot have the desirable generalizability power for data elicitation.

A final word is that tourism academic curriculum should be so redefined that let the students in that discipline experience the interdisciplinary nature of the new tourism. Their Knowledge of four arts in that discipline should include: IT literacy, hermeneutics in defining ontologies, analytic history rather than descriptive one, and communication via the integrationists and environmentalist's perspective to develop algorithms, which can deeply communicate tokens to the tourists via the cyber.

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