The relationship to time, a new variable for segmenting expectations in the world of luxury tourism.

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ABSTRACT

While academic research thoroughly studied the relationship to time, its multidisciplinary nature makes its operationalization in marketing complex. We adopt the perspective of cultural anthropology to define three dimensions of the concept, legendary, modern, and precursor time. We validate an indirect measurement model of the time construct using photo-elicitation. We use this model to develop a typology of expectations, coupled with emotions, in the sector of high-end tourism. Four profiles emerge, the enriched nostalgic, the proud rebel, the fascinated explorer, the challenge seeker. We finally discuss limits and extensions to other industries.

KEY WORDS: time, relationship to time, tourism, high-end, modelisation, segmentation.

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"We always attach too much importance to the present. We get restless and, in the end, we only live on memories, as if the facts, like some cooked dishes, were only excellent when reheated. The moment slips through our fingers, shapeless, and it is afterward, when everything is back in order, that we savor it. And rarely in chronological order - which is beautiful bullshit of men, don't you think?"

 $(Jean\ Anouilh-The\ Arrest)$

INTRODUCTION

Time, and more specifically the relationship to time, has been the subject of much research. This research has characterized ecological time (Braudel, 1969; Noiriel, 2002), economic time (Becker, 1976), social time (Merleau-Ponty, 1962), individual time (Sartre, 1956), ideal time (Augustine, 1954), to use here only the definitions enumerated by Bergadaà (1991). These points of view complicate the operationalization of the relationship to time in marketing. The point of view we adopt is that of cultural anthropology (Arnould and Thompson, 2005; Waqas and alii, 2021), which, like Gurevitch (1976), considers that "time occupies a prominent place in the 'model of the world' characterizing a given culture".

The relationship to time is explanatory of consumption behaviors (Hannecart, 2002) because the relationship to time is "a dimension incorporating the patterns that enable the individual to make sense of social reality and the subjective vision of past and future" (Bergadaà, 1990, p. 290). We, therefore, assume that the individuals' culture moderates the relationship to time (Fabian, 1983, p.24). We are interested here in the time orientation sub-dimension, which anthropologists and psychologists define as the opposition between an "orientation towards the past" and an "orientation towards the future" (Kluckhon and Strodtbeck, 1973). They all proved that the time orientation is strongly sensitive to the cultural context (Graham, 1981). We follow Gentry and Stoltman's (1991) approach: they insist on developing valid measures of temporal orientation in the context of intercultural research. The relationship to time, by analogy with time perception, is a construct that responds to at least three measurement constraints: it is subjective, multidimensional (Bergadaà, 1991), and not directly observable (Pailler, 1996). A scale, the scores of which will predict future behavior, must therefore measure it.

Why should we be interested in the relationship to time in the consumption of high-end tourism offers? Quite simply because intrinsic and extrinsic motivations drive the consumption of luxury tourism products, like that of cultural products studied by Pailler (1996). Travel adds an obvious situational dimension, whose Lallement and Gourmelen (2018) highlighted the impact on the allocation of "resource time". We define three dimensions of the subjective relationship to time: legendary, modern, and precursor time (cf. Appendix 1). We choose to go beyond a simple orientation on the "arrow of time" (past, present, and future) to encompass values, tastes, sensibilities, and preferences, which arise from the subjective perception of time. We voluntarily discard present time (or real-time) because the present is only a "freeze-frame" between two realities, that of the completed past and the future in gestation (Bergson, 1907).

METHODOLOGY

The difficulty lies in the unobservable reality of the relationship to time, which forces us to measure it by its manifestations alone. The other advantage is to avoid a social desirability bias (Steenkamp et al., 2010), which would lead to a bias in the choice of one of the dimensions over the others. We opt for a technique popularized in the 1960s, photoelicitation, well adapted to the socio-cultural understanding of consumption practices (Rémy and Ndione, 2018). For all that, we adapt it to online questioning.

In the first phase, two directors of the Balistikart agency, Stéphane and Katia, experts in tourism and luxury, choose universes, and within each of them, a choice of photos, legendary, modern, and precursor, after we brief them on the expectations of the concept, legendary, modern and precursor. They select meta-universes (jewelry, shoes, fashion, hotels, restaurants, cars, tableware, architecture, etc.), some of which are partitioned into universes (e.g., jewelry is broken down into bracelets, necklaces, and rings). We take particular care to select photos comparable on all other criteria (aesthetics, quality, shooting, environment, context, staging, etc.) rather than the measured one: the object's legendary, modern or precursor character. In a second phase, we bring together a pool of eight experts, made up of academics (Jean-Claude, Jérôme), consultants (Paul-Henri, Laurence, Laurent, and Isabelle), luxury professionals (Valérie, Quentin) to validate the final choice of material. After briefing them on the research expectations, each expert classifies the photos into three categories, legendary, modern, and precursor. For each image and in each universe, we calculate a congruence score. After discussion between the experts, we reclassify, replace or delete the discordant photos in case of persistent disagreement. When the exercise proves unsuccessful for a given universe, we question its relevance. Finally, the experts choose sixteen meta-universes, broken down into thirty-six universes and three photos per universe (one hundred and eight). This material is the one used for the online questionnaire administered (see Appendix 2).

The online questionnaire consists of thirty-nine questions. We assign each respondent to one sub-universe for meta-universes that break down into several sub-universes. For each choice of photos, the respondent answers the following question: "Which image best reflects your character, your personality?" In the pilot phase, we add a direct questioning: the respondent chooses which of the definitions of his relationship to time, legendary, modern, or precursor, best suits his character and personality. Finally, from a list of twenty-eight, we ask the respondent to select the three emotions or sensations that he/she was most looking for in an outstanding tourist experience. In a pilot test, we select twenty-eight emotional states, extracted from the work of Zajonc (1998) and relevant to the theme of luxury tourism on the following four criteria, following Scherer's (2001) Stimulus Evaluation Checks (SECS): goal relevance check, implication assessment, coping potential determination, normative significance evaluation. Traveller Made, a network specialized in tailor-made luxury tourism, provided the database of respondents. It includes the agency's partners in all tourism areas (transport, accommodation, guides, etc.). We chose B2B professionals during a pilot phase because of their experience in luxury tourism, which they practice on behalf of their clients, and for themselves. In the end, 501 professionals out of 5,431 from 33 different countries responded to the questionnaire, a participation rate of 9.2%, and a high rate in B2B.

RESULTS

Modeling of the relationship to time

Our first step is to define the model that predicts an individual's relationship to time (legendary, modern, or precursor) based on the pictures they have chosen in the universes. We opt for a Logit Multinomial Model for the categorical variable (choice of pictures by universe) (Cédric Afsa, 2016). This model explains the relationship to time (R), legendary, modern, or precursor, using a linear function $v(x_{i,k})$, in which $x_{i,k}$ is a vector of explanatory variables for the individual i conditioning the choice of modality k, legendary, modern or precursor ($\epsilon_{i,k}$ being the associated error term) ¹. The probability that the individual i has the modality k (legendary, modern, or precursor) writes itself:

$$P(R_i = k) = \frac{\exp(v(x_{i,k}))}{\sum_{j=1}^{k} \exp(v(x_{i,j}))}$$
 (1)

We estimate this model by Maximum Likelihood. We take the modality 'legendary' as the reference for both the variable to be explained and the explanatory variables. Finally, we use a 'step-by-step' selection of variables based on the AIC (Akaike Information Criterion) (Akaike Hirotugu, 1974) to retain the smallest number of universes without degrading the model. We divide our respondent base into 80% for learning and 20% for testing to validate our model. The F1-score is preferred to the rate of well-classified individuals since the number of individuals in each class of the relationship to time is very different. To compensate for the imbalance of the classes -47% legendary, 46% modern, and only 7% precursors-, we use an oversampling technique, randomly drawing with putting back to balance the classes in the test and learning samples. Finally, the Multinomial Logit Model retains nine universes out of the 16 starting ones (jewelry, fashion, restaurants, cars and motorcycles, works of art, yachting and sailing boats, buildings and gardens, furniture, and perfume bottles). With a rate of well classified of .74 and an F1-score of .71, our model proves to be very satisfactory. We thus retain it for continuation.

Typology of individuals in their relationship to time

We choose to enrich the relationship to time' thus modeled to build a typology of individuals. We choose to enrich the relationship to time with the emotions or feelings most often sought when experiencing a luxury trip or stay (see Appendix 3). The four signaling variables, gender, age, family status, and the continent of residence, are additional variables. As the relationship to time and the emotions sought are all qualitative variables, we first conduct a Multiple Correspondence Analysis to transform them into continuous variables (Mullet, 1999). We retain the first 21 factorial axes, which total 81.2% of the total inertia. We use three successive methods to achieve the desired segmentation, the Ascending Hierarchical Clustering (AHC), the Dynamic Clustering Method or moving centers (k-means), and finally, the k-medoids method (a variant of the k-means method, in which the class centers are not the barycenters of the groups but existing observations called medoids). We base our

 $v(x_{i,k}) = x_i \beta_k \quad (2)$

¹ In the case of the Multinomial Logit Model (choice of photos by universe), v(.) is the matrix product of the responses of individual $i(x_i)$ that is multiplied by a column vector of parameters β_j , different according to the dimensions legendary, modern or precursor:

choice of the relevant algorithm on the characterization of the classes, their number, and sizes: we privilege the relationship to time, the subject of our research, in their description, and we aim to obtain a small number of classes of balanced sizes. The examination of the Dendrogram suggests four classes for AHC, a number used as a specification for the two other methods. Considering the above-stated criteria (characterization, number, and size of the groups), we retain the classification using the k-medoids method, which proves a lower sensitivity to noise in the data and outliers. The k-medoids' algorithm gives more balanced-sized groups compared to the others: in the case of AHC, the weights of the groups are 7.4%, 83.6%, 8.3%, and .7% versus 11.5%, 34.0%, 30.0%, and 24.5% in the case of the k-medoids. The p-values associated with the significance tests of variables' modalities between classes also prove the superiority of the k-medoids. This latter algorithm gives more p-values<.05 and a higher significance of at least one modality of the relationship to time (legendary, modern, or precursor) in each class. Finally, the linear discriminant analysis applied on the k-medoids segmentation correctly classifies 83.3% of the individuals from the test sample.

The classes' description, using the p-values of retained variables that complement respondents' profile and activity, is as follows:

- The Challenge Seekers: the first group gathers 11.5% of individuals, most of whom are precursors (p-value=0.00). They project extreme emotions and sensations in luxury tourism: they are passionate (p=.019), stimulated (p=.047), enriched (p=.00), but never fulfilled (p=0.046), peaceful (p=.05), or serene (p=.005).
- The Enriched Nostalgics: the second group includes 34% of the individuals, primarily legendary (p-value=.00). The emotional states most often associated with the luxury tourism experience were fulfillment (p=.01), comfort (p=.008), feeling important (p=.019), peaceful (p=.00), and inspired (p=.00).
- The Proud Rebels: the third group gathers 30% of the individuals. They are eager to express a non-conformist character in their travels. They are modern (p-value=.00), but not necessarily precursors (p-value=.99). Traveling is a way of affirming that they are free spirits and to "cleanse their soul of the bitter taste of life," to feel regenerated (p=.041). They are above all adventurous (p=.00), inspired (p=.00), and flee from comfort (p=.003) and a life that is too peaceful (p=.00).
- The Fascinated Explorers: finally, the fourth group totalizes 24.5% of individuals. They define themselves more often as modern (p-value=.00). Traveling means being ambitious (p=.00) but not necessarily adventurous (p=.00). What they seek above all is an enchantment (p=.00), fascination (p=.005), inspiration (p=.00), in a quest for eternal passion (p=.022).

In appendix 4, a brief description of the profiles on the socio-demographic variables of gender, age, marital status, and geographic origin. They reveal some difference at .05 level in our B2B sample, showing the interest of a typology based essentially on the relationship to time and the emotions associated with luxury tourist experiences.

CONCLUSIONS AND LIMITS

At the end of our research, we demonstrated the importance of the relationship to time in determining the luxury tourists' expectations. The relationship to time, defined according to three dimensions, legendary, modern, or precursor, has proven to be a key variable in the segmentation and understanding of the expectations of a target audience. The modeling of the relationship to time allowed the construction of a classification function with high predictive accuracy.

The objective initially assigned to our research is thus achieved: to propose the relationship to time as a new segmentation variable in the luxury tourism universe. Of course, many other researchers worked on time in marketing. Still, they have often focused on the perception of time, whether biological, chronological, or subjective, and its impact on consumption at each stage of life. We voluntarily adopt another conceptual framework, that of the anthropological and cultural perspective (Waqas et alii, 2021): the relationship to time as a structuring dimension of our values, our tastes, our artistic sensibilities, our cultural preferences, and more broadly, our relationship to others and to the objects that surround us, In our work, we take on the approach of many psychologists who, very early, considered that the way one experiences time varies significantly between individuals, and that these differences are meaningful on the characteristics of each personality (Wessman, 1973). However, to our knowledge, no other study has gone so far as to operationalize a model for measuring the relationship to time, using resources of photo-elicitation. The existing relationship between attachment to time that dominates an individual and the emotions that he projects in the experience of luxury tourism is also an interesting lesson from our research. The relationship to time, initially defined on its only cognitive dimension, enriches itself of an affective dimension, which plays a significant role in understanding the expectations around tourism products and services.

The tourism business historically and logically focused on travel and stays' geographical (spatial) dimensions. The relationship to time widens the field of possibilities in constructing personalized and unique offers for a clientele with very high purchasing power but very demanding. We also develop an indirect questioning on a methodological level, leaving each respondent, in a self-administered mode, the choice of various photos in different universes (nine in total) to measure our construct. This mode of questioning proves itself more effective than the direct one. It minimizes the over-declarative on the precursor dimension. It provides us with a powerful tool to analyze the relationship to time in very varied universes (jewelry, fashion, restaurants, cars and motorcycles, works of art, yachting and sailing boats, buildings and gardens, furniture, and perfume bottles). As in any academic and applied research, certain limits apply to our approach. The first of these is using an empirical database of tourism professionals rather than wealthy tourists. This choice is legitimate in a still exploratory phase. However, replicating our approach in other consumption universes, outside the sphere of tourism and luxury, using consumers rather than professionals, is highly desirable. Several promising future fields are still waiting for exploration.

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APPENDIX 1

Definitions of the relationship to time (legendary, modern, or precursor)

- <u>Legendary</u>: « I am drawn to ancient times, whether they are real, imaginary or symbolic, based on myths or legends. I like what is lasting, what is transmissible. The heritage of patrimony and the respect for traditions are important values in my life. »
- Modern: « I like change, novelty, and even the scarcity of what's ephemeral. I define
 myself as modern, attracted to new trends, following influencers (at times), and looking
 for permanent re-enchantment. »
- Precursor: « I'm quite rebellious. To be of one's time is to know how to challenge conventions, oppose stereotypes, and break the codes and customs to invent new ones. For me, disruption and audacity are the foundations of existence. »

APPENDIX 2

List of photos by universe (example on three of the nine final universes)

Initial and final lists of meta-universes and universes:

- Fashion accessories (bags, sunglasses)
- Tableware (cutlery, plates)
- **Buildings and Gardens** (buildings, gardens)
- Perfume (bottles)
- Shoes (sneakers, boots)
- Watchmaking (watches, clocks)
- Hotels (lobbies, rooms, bathrooms)
- Jewelry (rings, bracelets, necklaces)
- **Furniture** (desks, armchairs, chairs, couches)
- **Fashion** (hats, wedding dresses)
- Works of art (portraits, statues)
- **Restaurants** (interior design)
- Spas and pools (spas, swimming pools)
- Wine and Spirits (decanters, glasses, cocktails)
- Cars and Motorcycles (interiors, sport cars, motorbikes)
- Yachting and Sailing boats (sailing boats, yachts)

JEWELRY Rings	
 Bracelets	<u> </u>
Necklaces	







WORKS OF ART
Portraits







Statues







Buildings and Gardens Buildings







Gardens







APPENDIX 3

List of emotions related to a luxury tourism experience

Emotions et sensations			
Accomplished	Inspired		
Adventurous	Nostalgic		
Amazed	Passionate		
Ambitious	Peaceful		
Challenged	Proud		
Comfortable	Pumped up		
Enchanted	Pushed forward		
Energetic	Radiant		
Enhanced	Rebellious		
Enriched	Regenerated		
Excited	Sensual		
Fascinated	Serene		
Fulfilled	Stimulated		
Important	Thrilled		

APPENDIX 4

Class profiles cross-tabulated by socio-demographic variables

	TOTAL SAMPLE	THE CHALLENGE SEEKERS		THE ENRICHED NOSTALIGICS)	THE PROUD REBELS	1	THE FASCINATE EXPLORERS	D
		[a]		[b]		[c]		[d]	
	(n=501)	(n=58)		(n=170)		(n=150)		(n=122)	
(IN %)									
Gender									
Men	62,9	52,1		62,9	[a]	64,3	[a]	66,6	[a]
Women	37,1	47,9		37,1		35,7		33,4	
Age									
Less than 35 years old	23,1	22,9		21,7		26,2		21,4	
Between 35-44 years old	33,3	39,6	[b] [c] [d]	32,9		33,3		31,1	
Between 45-54 years old	30,7	31,3		32,2	[c]	26,2		34,0	[c]
More than, 55 years old	12,9	6,3		13,3		14,3		13,6	
Marital status									
Couple with children	43,1	47,9	[c] [d]	49,7	[c] [d]	34,9		41,7	[c]
Couple without children	30,0	22,9		21,7		43,7	[a] [c] [d]	28,2	[b] [c]
Single	26,9	29,2	[c]	28,7	[c]	21,4		30,1	[c]
Continent of living									
Europe	60,2	64,6	[c] [d]	63,6	[c]	56,3		58,3	
North and South America	21,9	18,8	-	17,5		27,8	[c]	22,3	
Afriva, Asia, Oceania	17,9	16,7		18,9		15,9		19,4	

[x] Significant diff. .05