

A DESIGN MANUAL FOR

Astro-Tourism Experiences



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INTRODUCTION

This “A Design Manual For Astro-tourism Experiences” offers guidance and knowledge on improving the quality, appeal, and diversity of the astro-tourism experiences that may be designed and implemented in different local settings. It is primarily aimed at owners, managers, or decision-makers of institutions that offer astronomical tourism experiences today, including tourism enterprises, municipal observatories, scientific observatories, etc. The manual is also for entrepreneurs who want to venture into this promising sector.



Today we live in the EXPERIENCE





ECONOMY...

Flooded with many advertising messages on a daily basis, we find ourselves drawn to those that promise something much more than just the advertised product or service. This idea of “something else” is the “experience”. An experience may be associated with objects as dissimilar as a car, a sound system, hotels, mobile phones, events, slippers and, in short, the most unlikely collection of products and services – tangible or intangible – available for consumption in our contemporary society. That leaves us with one question:

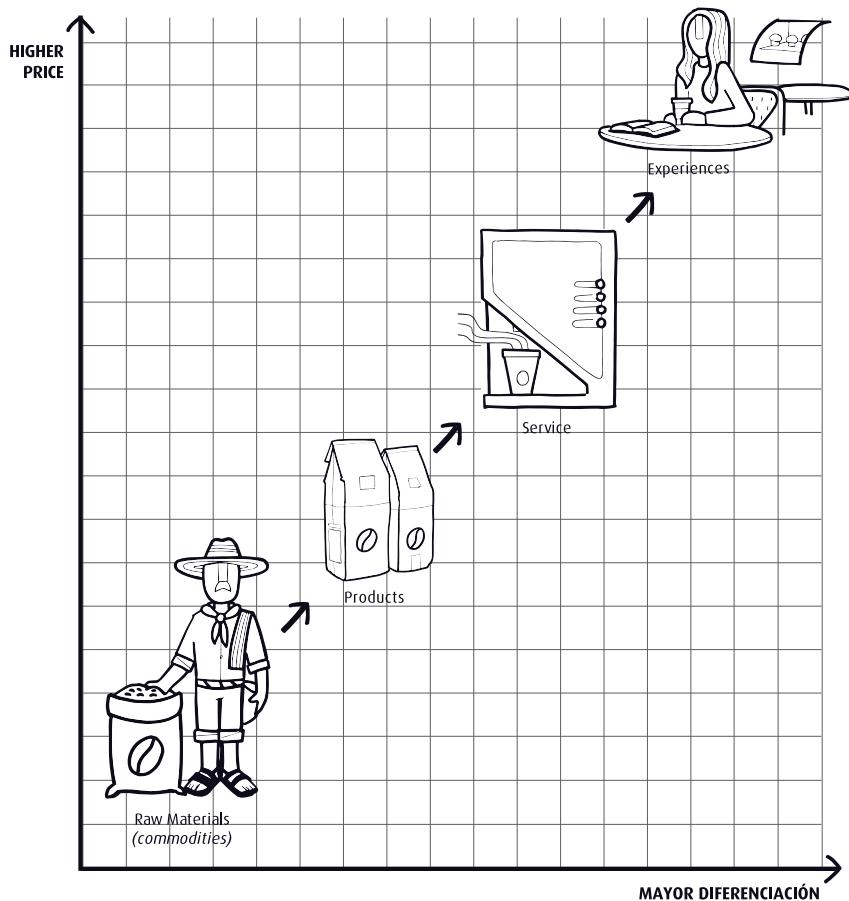
What does the promise of an experience refer to?

In 1998, the Americans Joseph Pine and James Gilmore published an article titled *Welcome to the experience economy* in the Harvard Business Review magazine, which later became extremely popular and remains relevant even to this day. In their article, the authors confirmed that products and services undergo different levels of processing before they arrive in the market, and this level of processing directly influences their economic value. The most basic level of processing is seen in the supply of undifferentiated products or **commodities**. At the second level are differentiated **products** – the production of which requires commodities and other inputs that have a higher economic value than the products themselves. The third level comprises **services** – which may or may not use goods as inputs – that have greater differentiation and value than the goods in the previous level. The fourth and the highest level – in terms of both differentiation and economic value – belongs to **experiences**, which are offered to consumers as a particular combination of goods and services, specially designed to produce certain effects on those who experience it.

Let's understand this with the help of a specific case. Like coffee, for example.

The most basic level is the coffee bean, a raw material that is used to make coffee and is sold as a *commodity*, by the bag. Except for certain region-specific varieties, coffee fetches practically the same price for all the producers: about €0,0069 for the quantity required for one cup. At the second level of processing is the packaged coffee: a processed product that is already differentiated in terms of roasting and packaging, and it is sold to the consumer – typically, in a supermarket – at about €0,12 for the quantity consumed in one cup. The next level could be a cup of coffee brewed by a vending machine. It incorporates elements of a service offered by an automatic vending machine: fresh preparation and tailored to the consumer's preferences. This will be priced at around €0,46 per cup. At the fourth and the highest level, we have a café, with furniture, lighting, decorative elements, access to wi-fi and newspapers, and a specific quality of service promised by the staff, among countless other details. In other words: this is an experience, for which users will pay €1,5 per cup or even more.

The main idea that Pine and Gilmore convey is that in the current economy, more and more companies are looking to integrate goods and services to offer their customers something more elaborate. By integrating more dimensions, they are attempting to differentiate themselves from the competition.



... PARTICULARLY IN THE TOURISM INDUSTRY

Although since its origins tourism has been regarded as a service-sector industry, it has been one of the first and most active economic sectors to embrace the concept of experience. This is particularly evident in the international market, which is marked by intense competition between tourist destinations. Travellers to such destinations have become more demanding: they take for granted that they will have access to high-quality service standards, and they seek experiences that will surprise and excite them.

Today, both within the economy in general and in the tourism sector in particular, **the inclination to offer experiences appears to be growing increasingly** more stronger¹. This statement, among many others, made by the Ministry of Foreign Affairs of the Netherlands in 2015 captures this sentiment²:

“There is a growing movement in Europe towards an experience economy, where consumers are increasingly looking for products and services that are unique and exclusive. This movement is particularly noticeable in tourism, where European travellers are increasingly looking for experiences unique and exclusive that will create lasting memories.”

Two main aspects characterise this trend in recent years. On the one hand, tourism experiences are growing in number and have become more immersive, engaging and customised in order to appeal to an even wider audience base. On the other hand, the demand for experiences has exploded. With every passing day, more people are becoming discontent with generic, undifferentiated tourism products and continue to search for something that is memorable and exciting. One of the reasons for this is that tourism markets have to cater to “millennials”³ (also known as “generation Y”) – mainly in

1 Resonance consulting (2015). *Tourism and Travel Trends Report*; JWT. (2015). *10 Trends Report*.

2 CBI, Ministry of Foreign Affairs, Government of Netherlands (2015). *CBI Trends: Tourism from Europe*.

3 Those born between 1981 and 1996 are usually called millennials.

developed countries and in some regions of emerging countries – who have specific consumption patterns and preferences. Adding to this is the rising popularity of the internet and social networks, whose immediacy and interactivity have set new standards and expectations in relation to travel. As a result, tourism markets are now expected to offer more than what is directly available on digital media.

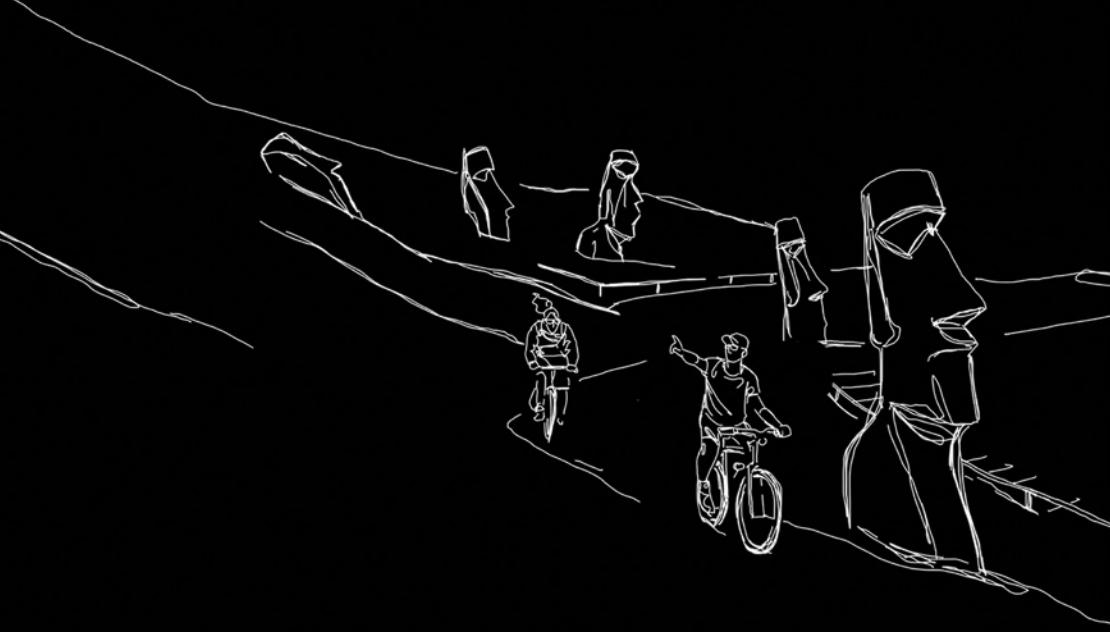


Today, in the tourism sector, offering quality experiences has ceased to be a style or a trend: it has become a prerequisite for staying competitive in the industry.



WHAT IS A “TOURIST”





EXPERIENCE”?



Among the various events associated with tourism, a “tourist experience”:

- ❖ **Offers different goods and services**, which may include some of the more traditional ones, such as transfers, meals, accommodation, guide service, *souvenirs*, etc., as well as other lesser-known ones specially chosen for the occasion. The “experience” does not replace tourist services but integrates them in a special way, ensuring complete satisfaction and producing a certain effect on those experiencing it. Naturally, a good tourist experience requires, among other things, high-quality tourism services.
- ❖ **Engages multiple human senses**, such as those of sight, sound, smell and taste. Typically, this is done for the purpose of creating a special ambience (“immersive”, as it is often called) that immerses the tourist/tourists in the surrounding stimuli and thus intensifies their experience.
- ❖ **Appeals to a variety of human dimensions**, with the emotional dimension being the most important one. Other dimensions include physical, intellectual, social, and even spiritual. Generally speaking, the most memorable and most valued experiences are those that manage to engage a number of different dimensions of the visitor.
- ❖ **Incorporates a narrative**, i.e. a story or set of ideas that lend meaning and structure to the various elements that make up the experience. These can be made explicit – via images, words, by a guide, etc. – or exist only in an implicit form, providing a theme to the script of the experience. Or somewhere in between the two. When it is well achieved, the narrative can be a major attraction in its own right.
- ❖ **Has an active character**. Any experience should allow the tourist to interact with their environment in a way that goes beyond contemplation alone. Through such interactions with the material (equipment, infrastructure, nature, etc.) or the social (guides, people, etc.) or local (other tourists, etc.) environment, the tourist becomes involved in the development of their own experience. This also enhances their overall commitment to what they are going through.

And above all...

- ❖ **Satisfies the tourist**, the one who lives the experience. By definition, a tourist experience is subjective, and each subject will be the one to determine how good (or bad) the overall experience has been. This calls for a major shift in focus compared to, say, the manufacturing of standard products or services, where quality control can be objectively measured (e.g. by inspecting finished products at the end of the production line). The design and implementation of quality experiences should be tailored to the people who will experience it, keeping in mind their preferences, attitudes, skills and previous knowledge.

WHAT IS THE PURPOSE OF DESIGNING A TOURISTIC EXPERIENCE?

If you are the owner or manager of an institution that receives tourists, then carefully designing (and implementing) an experience for your visitors can bring significant benefits:

- 1. Tailor your offer to best suit the preferences and needs of the audience segments you currently serve.** You can also explore new audience segments that interest you and offer something different from the current one-offer. A well-designed experience can save you from incurring additional costs: it will let you omit elements that do not directly target the requirements of your strategically valuable audiences⁴.
- 2. Differentiate and add more value to your offer because your specific experience design,** built according to your own particular story and script, can distinguish you from the competition⁵. In addition, designing an experience offers multiple ways to add value, (e.g. by introducing new goods, services and activities) and enables you to make use of the possibilities offered by your natural, cultural and even commercial environment⁶. Examples of the above are selling *souvenirs*, guide services, food products, and local products or bundling your offer along with that of other bidders so that it is mutually beneficial (for example, by offering astro-tourism and wine).
- 3. Build flexibility into your offer.** Allow your experience design to follow different formats in response to varied needs, so that you always deliver a satisfactory experience to your audience. A common example in astro-tourism is to have an alternative programme schedule on sky observation nights in case it is cloudy.

4 Reid, R. y Bojanic, D. (2012). *Hospitality Marketing Management*.

5 Pine, B. J. Gilmore, J. H. (1998). *Welcome to the experience economy*.

6 Tourism Australia (2008). *Australian Experience Industry Toolkit*.

All of the above, however, ultimately translate into two essential benefits:

4. **Generate greater satisfaction and memorability among visitors**, which is the ultimate purpose of all experience design. Incidentally, it is also the fundamental way to build loyalty among your audiences and also attract new ones⁷.
5. **Increase your income**. If the experience you offer is satisfactory and memorable, you will be able to charge more, and a well-designed experience will also be more cost-efficient. Even if your objective is not to generate income, you can extend your influence and valuation, by linking the benefits back to your institution as well as the specific experience offered.

⁷ Pine, B. J. Gilmore, J. H. (1998). *Welcome to the experience economy*.

ASTRO-TOURISM EXPERIENCES



“Astro-tourism comprises recreational and/or educational activities which are developed around the cosmos, astronomical phenomena and the ways of understanding them, both past (e.g. cosmogonies, mythologies, etc.) and present, including the latest scientific findings as well as the instruments and technologies that astronomers use in astronomy nowadays”.

The above definition was developed in 2015, during the Astroturismo^{8,9}. Astro-tourism experiences typically belong to one of these categories.

8 Verde (2015). *Study on astro-tourism demand in Chile*.

9 Verde (2015). *Study on the astro-tourism offer in Chile*; Verde (2015). *State-of-the-art in astro-tourism*.

Sky observations in observatories	They take place in enclosures that are built and/or modified for astronomical observations and tourist services. They usually involve the use of telescopes.
Excursions with outdoor observations	These require moving to dark sites (by car, on horseback, on foot, etc.), to observe the sky, whether with the naked eye or through the use of binoculars and/or telescopes.
Tours of scientific facilities	They refer to visits to scientific observatories, those with advanced technologies as well as those that are more historical in character. They usually cover the use of the telescopes and spaces where astronomers work.
Lodging and astronomical observations	This refers to hotel services that include activities and possibly decoration related to astronomy.
Solar observations	Carried out during the day, they involve observing the Sun using solar telescopes or specially adapted telescopes (i.e. with special filters).
Astrophotography	This includes everything from renting specially equipped telescopes to beginner and advanced level workshops on photographing celestial bodies.
Lectures and courses	Presentations on astronomical topics, conducted by guides, astronomers or other experts, together with astronomical observations.
Astronomical exhibition tours	Visits to museum exhibitions or outdoor displays (astronomical parks) centred on the theme of the cosmos and/or the ways of studying it.
Audiovisual presentations	These consist of shows projected on planetariums - fixed or portable - and videos and digital presentations made by guides or individuals with a knowledge of astronomy.

Of course, the above list is far from being exhaustive or definitive (as new experiences can be invented every day). It should also be noted that astro-tourism products offered to the public can combine a number of different experiences apart from those already described (e.g. they can be combined with non-astro-touristic experiences such as *trekking*, gastronomy, etc.).

THE PLOT, A DRAMATIC STRUCTURE





AND OTHER KEY ELEMENTS OF AN EXPERIENCE

Every tourist experience – or every experience for that matter – has certain structural elements in common. Understanding what they consist of, how they operate and how they are related to each other can be very helpful in guiding the design process.

THE SCRIPT AND A DRAMATIC STRUCTURE

Experiences do not happen instantaneously: they unfold over time. In fact, any tourism experience can be understood as a temporal succession of events, organised according to a certain prior design, which we will call a **script**. The script specifies the main events that constitute the experience as well as the way (explicit or implicit) in which these events acquire coherence and meaning, such as through a certain story and/or central ideas that we will call **narrative**.

Such a script can be very detailed with little room for variation, or it can be very general and allow for major adaptations and variations each time the experience is lived.

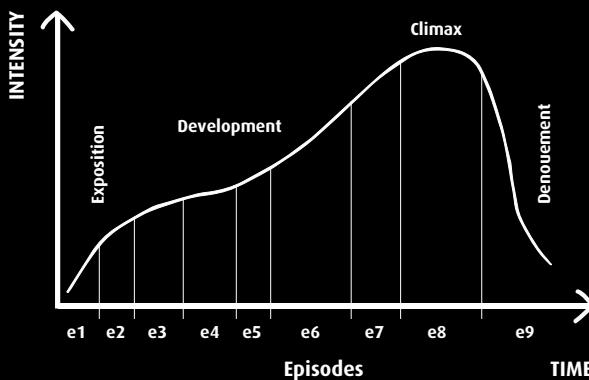
A good experience requires that each episode is meaningful, and it also requires that the sequence of events create a good, dramatic structure. We use “dramatic structure” – originally taken from theatre but also used in literature, cinema and other arts – to refer to the order in which events occur in an experience. Ideally, as the plot progresses, the interest and emotional commitment of those who live it should not wane.

In fact, they should, hopefully, increase and, thus, maximise the attractiveness and memorability of the experience as a whole. For those involved, the intensity of the experience will vary as the experience progresses, and this is an essential aspect that needs to be addressed in its design.

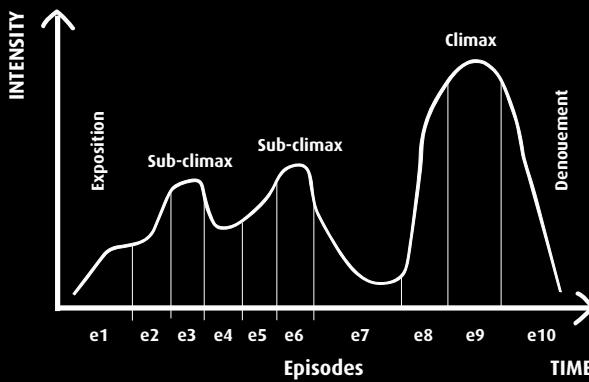
One of the most popular plots follows the so-called dramatic or *classical* structure, whose diagram is presented on the next page: it begins with an exposition, gives way to the development of the conflict, culminates in a *climax* –where the intensity peaks – and then finally tapers down to the *denouement*. The other diagram also shows a dramatic plot structure that has several *sub-climaxes* and an *anticlimax*, before the main *climax*.

For design purposes, the above sequence of events can be divided into a number of meaningful units or episodes, each of which has its own characteristics and associated actions.

Classic dramatic structure



Dramatic structure with sub-climaxes



ELEMENTS OF EACH EPISODE

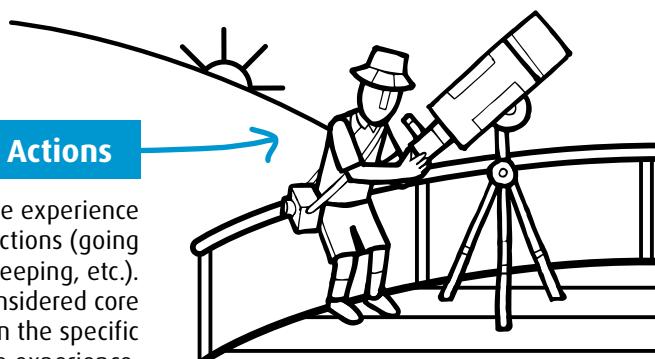
In each episode of an experience, it is possible to identify certain essential elements. Of course, the form and relevance that these elements assume will depend on the specific design of the experience.

The subject living the experience. Often an experience involves more than one person at the same time, in which case the interaction between them may also need to be designed.

Protagonist

Both core – which define the experience – and auxiliary or support actions (going to the toilet, eating, sleeping, etc.). The same action may be considered core or auxiliary, depending on the specific design of the experience.

Actions



Place

The setting in which the episode takes place, including the landscape, architecture, furniture, colours, sounds, smells, etc. It facilitates the actions and evokes an emotional response thus influencing the mood of those who live the experience.



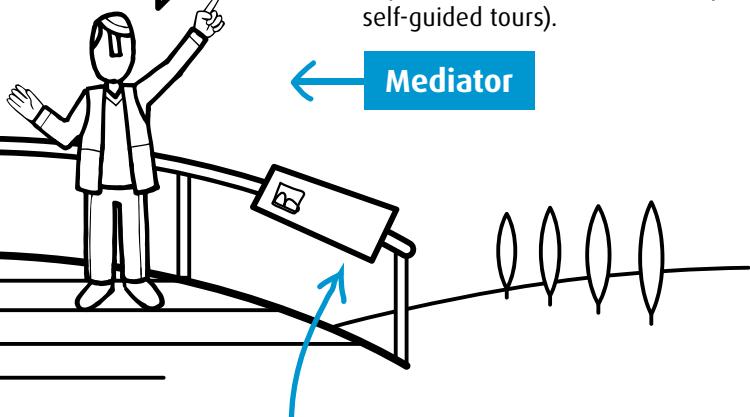
All kinds of media, objects and installations specially designed to give meaning to the actions, such as videos, panels, signage, audio guides, etc.

Stories



Person(s) who interacts with the subject living the experience and executes certain functions, such as leading the action, providing interpretation cues, etc. Usually the mediator corresponds with guides, receptionists, waiters, etc., although there are experiences that do not have any mediators (e.g., self-guided tours).

Mediator



Elements of interaction

All kinds of media, objects and installations specially designed to give meaning to the actions, such as videos, panels, signage, audio guides, etc.

A step-by-step guide **DESIGNING**



ASTRO-TOURISM EXPERIENCES

The suggestions given on the following pages can be used either to create a new experience or to enhance an existing one. Although they have been explained keeping in mind some common types of astro-tourism experience – those that involve some form of sky observation – many suggestions can be applied to any tourism experience.

As shown below, designing, or redesigning, an experience is a process that can be broken down into nine steps.





1 KNOW YOUR AUDIENCE

To begin with, understand the type of visitors that currently come to the area where you are located. If you have already offered an experience, try to understand the profile of those who are currently consuming it.

Are they high-, middle- or low-income tourists? What are they interested in doing? What kind of activities do they enjoy? Are they locals or foreign? From which countries do they come from?

- ❖ Check with your municipality for the information available on tourists in your region and even at the national level. You can complement this with your direct observations and personal assessment. By the way, **you can even develop an experience for an audience that has never visited the area** (e.g. foreign astrophotographers) by undertaking special promotional efforts.
- ❖ If you already offer an experience, **your current visitors are an extremely valuable source of knowledge**. Use some method to collect information about their profile, interests and expectations – are they interested in observing some scientific phenomena, do they care about food, and so on. Ask for feedback on their experience with you, as this will help you improve it.
- ❖ **Identify the audience segments to whom you can target your experience.** Keep in mind that good experiences tend to have some kind of segmentation: they are not designed to appeal to all audiences equally.

2 KNOW YOUR ENVIRONMENT

Most of your visitors will come from different places, and they will be interested in knowing what is special about the place where you live. So think of your natural and cultural surroundings as a great source of information and activities that you can incorporate into your experience to enrich it significantly.

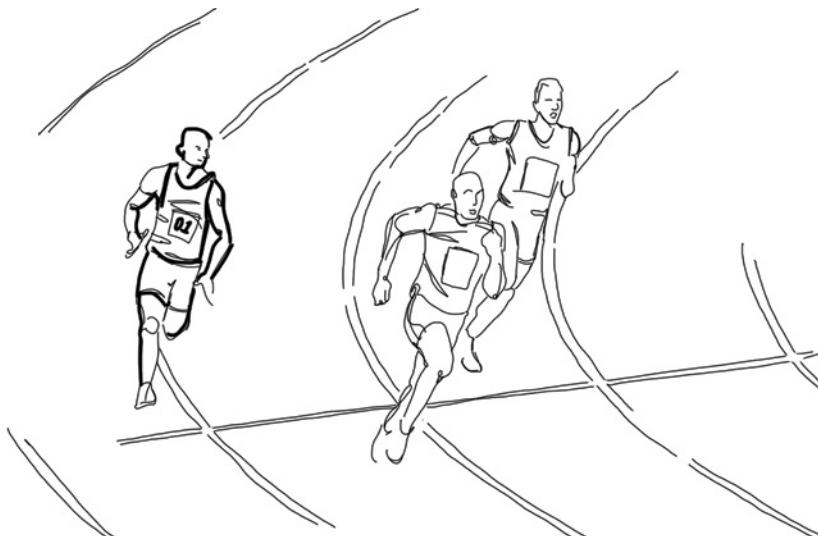
- ❖ **Get to know your locality and region and identify what is unique locally**, regionally and/or nationally. Also make sure you know about the region's latest achievements and challenges: visitors value learning about local current affairs.
- ❖ **Identify the local products** (food, handicrafts, etc.) that you can incorporate into your offer: visitors value authenticity. Also identify suppliers of non-astronomical tourism offers with whom you could develop mutually beneficial relationships (restaurants, transport services, etc.).
- ❖ Explore the relationship between the cosmos and the sky observation practices of the **indigenous people** who inhabit or inhabited the area.
- ❖ Find out about the main features of the **scientific observatories** in the vicinity: the technology they use, the main discoveries they have made, their current research topics, etc.
- ❖ Identify social events (anniversaries, festivals, etc.) and, going beyond the local environment, astronomical events observable from where you are located (eclipses, meteor showers, etc.), in order to create special experiences.



3 KNOW YOUR COMPETITION

Knowing the details of what your main competitors offer can help you differentiate your offer. This will end up benefiting everyone, because creating differentiation among the products within an area will reduce local competition and boost the tourist destination as a whole.

- ❖ Find out about the astro-tourism experiences on offer nearby and **identify their most distinctive elements.**
- ❖ **Identify activities, themes or styles** that the competition does not cover or that you think you could present in a better way or with a particular style.
- ❖ Find out about astro-tourism experiences offered in other locations, regions and even countries. Look for inspirational elements that you would like to replicate or adapt to your case.





4 DEFINE YOUR EXPERIENCE

Once you have analysed the information about your audience, actual and/or potential, your environment and your competition, you will be in a position to define the essence of your experience: what will be its unique strength and serve as the basis for all the design and implementation decisions?

- ❖ **Define the main audience segments to which your experience will be mainly targeted.** Locals or foreigners? High, medium or low income? Amateur astronomers? Couples and solo travellers or families? Will you have activities for children? Although you can target more than one audience segment, try not to consider them all as target audiences, as this will make it more difficult to focus your offer. If you are already operating an experience and you have gathered information about your current audience segments, identify the preferences and opinions that you will take into account to improve your current experience.
- ❖ **Define the objectives of your experience**, i.e. the main effects you want to have on your visitors, whether at the level of emotions, knowledge or actions. In astro-tourism, these may include “to amaze them with the wonders of the cosmos”, “to entertain”, “to offer rest and relaxation” or “to teach the basics of astronomy”, just to name a few examples. Remember that these are the main effects, so try to restrict yourself to choosing one or two.

- ❖ **Define the script of your experience**, i.e. the sequence of the main events and the main ideas that you will communicate in each of them (e.g. the landscape and the history of the place you are in, information about the Solar System, major astronomical discoveries, etc.). Check that the sequence has a good dramatic structure, capable of maintaining and hopefully elevating the interest and involvement of your visitors as the experience progresses. Try to identify the most intense event (climax) and try to place it at the end of the experience. Remember that, in general, differentiating events from one another helps to retain the audience's attention. Segment the script into episodes, i.e. meaningful units that you will address individually as you develop the experience design (typically these will be receiving the visitors, introductory talk, night observation, etc.).
- ❖ **Define the narrative of your experience**, understood as the central story or ideas that will lend it a special meaning. Examples of possible concepts to use could be, "we can all be astronomers", "human beings still have much to discover", "the advances and achievements of science are marvellous". Try to choose one or two central ideas.
- ❖ Check whether everything you have just defined makes good use of the **possibilities offered by your environment** (step 2) and **sets you apart from your closest competitors** (step 3). Think of the elements that you can surprise your visitors with. Then check if your script and narrative are appropriate to achieve your objectives, considering the audiences you want to reach. If necessary, make adjustments to your definitions.



5 DEFINE THE ACTIVITIES AND ROLES FOR EACH EPISODE

With your defined objectives, story and the narrative of your experience, it is now time to design in detail what you want in each episode. Remember that “the experience is only complete with the one who lives it”, so take care, throughout this process, to put yourself in the shoes of your visitors. Imagine their possible reactions and identify what might be most attractive to them.

- ❖ To begin with, **decide how scripted you want the activities and narratives of your experience to be.** You can either put down, word for word, exactly what will be spoken by the guide (best avoided in the interest of personalising the experience). Or you can provide broad directions, creating more room for varied interpretations of the experience by the guide and/or by the visitors themselves. Remember that, in general, allowing visitors to define their own experience to some extent serves to increase their involvement in and emotional commitment to what they are experiencing.

- ❖ If you have information about the profile, preferences and/or opinions of your visitors, use it to design an experience that can surprise them. Anything below the level of their expectations will leave them dissatisfied, while anything above it will generate surprise and satisfaction. Remember that what you offer should have something *extraordinary* about it, because people go sightseeing precisely to experience something different from their ordinary experiences. Now, choose any episode of your experience (the first one, the one you consider most important or another one) and start designing it.
- ❖ **Define the activities that the episode should consist of and separate the core ones**, which define the experience, from the supporting ones. For the first few episodes of your experience, specify how the episode should start, develop and end, detailing what you expect the guide (or other mediators) to do and what you expect the visitors to do and feel. For the later ones, try to include exciting opportunities for participation and interaction. If you identify any contingencies that could seriously affect the experience (typically in astro-tourism it is a cloudy night that does not allow for observations), try to specify an alternative course of action.
- ❖ **Define the approximate duration** of your experience and the maximum size of the groups.
- ❖ For each core activity, **define the roles to be played by the guide and/or other mediators**, both functionally (e.g. teaching visitors how to focus the telescope eyepiece) and in terms of evoking feelings and emotions among the visitors (e.g. facilitating an understanding of distances in the universe and generating enthusiasm to learn more about other astronomical topics).
- ❖ For each core activity, **identify the content to be communicated and define the moment to do so, as well as the information elements to be used** (guide's story, panel, video, etc.).
- ❖ Be sure to include the procedures, facilities and other elements required to ensure the comfort and safety of your visitors, after carefully **considering their possible limitations** (mobility, age, altitude sickness, etc.). A well-designed experience can be completely ruined if, for example, your visitors are freezing in the cold. Check that your activity

design fits well with what is appropriate for the situation (e.g. for when they have just arrived, tired, after a two-hour journey).

- ❖ **Define the specifications for the location where the episode will take place**, in terms of its architecture, decoration, furniture, equipment, etc. Think both in terms of physical (e.g., space for 20 people, a projector, backdrop and chairs for a talk) and emotional criteria (e.g. a cosy and relaxed space, suitable for chatting with other visitors and enjoying the scenery, while enjoying an aperitif).
- ❖ Check that the activities, roles, content and location requirements you have defined are consistent with your core definitions of audience, objectives, script and narrative.
- ❖ Once you have finished the design of the first episode, repeat the procedure for each of the other episodes, until you have completed them all.

GENERAL RECOMMENDATIONS

- ❖ Make sure that the design of each episode is **different from that of the other episodes**, both in nature and intensity: if they all look too similar, your visitors' attention may wane. Introducing variety in your episodes will help you cater your experience to different audience segments, with different interests. Remember that you can have intermediate episodes where the intensity decreases and then let it grow again later on. As much as possible, avoid mechanical repetition of activities throughout the experience.
- ❖ Remember to design the **transition from one episode to another**, making sure that it is smooth, without any sudden jumps or cuts in the experience of your visitors.
- ❖ **Avoid talking about many topics in great detail.** Select the content you are interested in conveying and choose a level of depth that is interesting – and not boring – to your visitors. On the other extreme, avoid being too superficial and disappointing visitors who want to know more. Order the topics to be communicated such that you can maximise the understanding and attention of your audiences. Avoid repeating content, unless you want to emphasise certain concepts.



RECOMMENDATIONS PER EPISODE

One of the most common astro-tourism experiences is the *night-time sky observation*. And although each experience will have its own design, most of them are based on more or less the same episodes. For this reason, here are some specific recommendations for each of the episodes that typically make up such an experience. Of course, some experiences may use only some of these episodes or have them organised in a different order or combine them with others not described here, etc.

Preparations

Each visitor's experience begins when they **start to seek information about your offer**. Thus, it usually starts at a distance, typically when they are in their homes. That is where their first impression of you as a supplier is created and where their expectations from your experience begin to take shape. Thus, your first interaction with them can be defining, for better or worse.

- ❖ Most tourists – both domestic and international – **learn about their destinations online**. So, it is very important that your website is clear, attractive and up-to-date. Make sure you clearly communicate what you offer and avoid creating false expectations (more details in *Step 8. Implement your promotion plan*).
- ❖ If you are asked questions – by phone or email – **respond to them quickly, clearly and make sure you have been understood**. If you need to make a change to a planned programme, immediately inform those who have already booked it.

Journey

Many astro-tourism experiences take place in remote locations or on hilltops, made accessible by unpaved roads and sometimes only in fair weather conditions. In such cases, **the journey will also be part of the experience**,

so make sure it is a satisfactory one.

- ❖ If you are responsible for transporting your visitors to the premises, your driver will also play the role of a guide, conveying first-hand accounts of the place and the experiences to come. Remember that a good description of the landscape can more than compensate for the ruggedness of the route. Also make sure that the driving is responsible and is not a cause of anxiety for the passengers.
- ❖ If your visitors are expected to arrive by their own means, **provide clear information about the route on your website and share maps and location details**. In short, your communication should perform the role of the driver: **identify and describe the main attractions** on the route.

Welcome

The visitor's arrival at your facilities is the first time when the expectations they have built will meet the reality of what actually exists and happens.

- ❖ It is highly recommended that **each visitor is personally greeted and welcomed** by someone who knows their name (e.g.: from the registration). If the journey was more or less long, offer the use of the toilets on the premises and maybe even provide a refreshing drink. Remember that the first 5 minutes have a great influence on the opinion that the visitors form.
- ❖ Once the visitors have assembled, the guide or host should **clearly signal the start of the experience**. Start by thanking them for the visit and highlight some key positive elements of the place and talk briefly about what they are going to experience (without giving too many details, so as not to spoil the surprises to come). Essentially, this is the same as confirming that their decision to come was a good one. In practical terms, it helps to frame expectations, to reorient those who may have developed erroneous ideas about the experience and to set the mood for enjoying what is to come.

- ❖ This can be followed by practical instructions on safety, caring for the environment, etc.
- ❖ If the time is appropriate and food service is available, it will be a good idea to offer a small aperitif before starting on the actual astronomical activities.

Tour of the site

- ❖ Introduce your visitors to the geography of the area. Identify the main landmarks visible in the landscape and give them a short historical overview of the place they have come to (e.g. who were the first settlers, what human activities characterise it today, etc.).
- ❖ If your experience uses a house or a building, communicate the most important aspects of its **history and architecture**.
- ❖ **Share details about the type and function of the astronomical facilities and equipment** they will use. Incidentally, if the experience is a visit to a scientific observatory, this activity may be the core activity and require, on its own, a detailed design.

Observation

- ❖ **Take advantage of the last hour before sunset to start the observation activities.** In addition to being very pleasant, the presence of natural light facilitates easy conversation between the guide and the visitors¹⁰.
- ❖ **Encourage naked-eye observations as well as the use of binoculars:** these can be even more interesting than telescopes. Further, this does away with the queues for observing, which are usually necessary

¹⁰ At certain times of the year, it will be possible to spot Venus and its phases at sunset. You can use free online programmes, such as Stellarium, to find out at what times this is possible.

when using telescopes.

- ❖ Allow visitors to interact with the instruments, even if it is for a short while. For example, teach them how to adjust the focus of each lens of the binoculars or how to adjust the eyepiece of the telescope. If you can, teach them some more complex operations.
- ❖ **Establish a certain script for the observation itself**, organising the sequence of what they will see. For example, you can start with explaining the Solar System or some other astronomical concept, review the various types of celestial objects, go through them from the closest to the farthest, and conduct a historical tour of astronomical discoveries. You have to decide the order of information that works best for you.
- ❖ Have a sufficient number of telescopes available, especially if you are hosting large groups. Remember that waiting in line often makes the experience less satisfactory.
- ❖ Make sure your visitors do not get cold, as this can ruin the whole experience. Have blankets or other warm clothing available for those who need it.
- ❖ Do not let the observation continue for too long, as low temperatures and maintaining the body in the same position (standing, looking through an eyepiece or staring up) can make things tiring. After a reasonable period of time, move on to another activity, such as a talk or public lecture. After this, you can return to the observation if you feel it is appropriate.

Thematic Talk

- ❖ If it is a talk that your own team will prepare, do your own research on the topic¹¹, select relevant and attractive images and develop an interesting and understandable script. Remember that a **well-crafted presentation can be as engaging as, if not more than, the observations**. And, in any case, it is an excellent complement to the latter. Also, choose the topic(s) of your talk(s), keeping in mind your experience design as a whole.
- ❖ Prioritise the information you deliver and avoid trying to cover too much content. It is better to select just a few topics and address them well.
- ❖ On the internet, you will find many resources and instructions on conducting your own home-made experiments together with your visitors. This can be a way of explaining astronomical topics in an entertaining and participatory way¹².
- ❖ In general, prioritize the use of supporting resources over which the presenter can have permanent control, such as a digital presentation (PowerPoint slides or similar), mock-ups¹³, printed elements, etc.
- ❖ You always have the option of using a video produced by others. Remember, however, that it is more difficult to make your experience memorable and unique with a video, as most of your visitors can see videos on the internet in their homes. If you have to choose this option anyway, make sure that the video you choose is as relevant as possible to your overall experience design.

¹¹ Try consulting astronomers. Many of them are very willing to answer questions.

¹² To get started, we suggest you check out <http://astroedu.iau.org/>.

¹³ On the internet you can even find models of astronomical objects such as asteroids, nebulae and planets, ready to be printed on a 3D printer.

Closure

If your experience has been satisfactory, closing it will be a special moment when you can thank your visitors for their visit, reinforce the overall sense of what they have experienced and infuse a positive feeling and mood in your visitors (assuming your experience was a success, of course).

- ❖ **Give some rituality to the closure.** Decide on what the guide, or whoever is talking, will say to indicate the end of the experience. Find the best way to communicate it and choose the most appropriate place to do it.
- ❖ Consider doing a simple activity like taking a photo of the whole group and then emailing it to everyone. It will also serve to strengthen the bond with each of your customers.
- ❖ After the closing remarks, you can ask your visitors to complete a short survey. If you are going to ask someone for their contact details, do so politely and explain why (e.g. "We would like to let you know when we have activities or special offers").
- ❖ If you have souvenirs or other products for sale, this is a good time to invite people to come and see them. Remember that shopping can be part of the experience and your offer can include your own company or institution's souvenirs, astronomical souvenirs and also locally made products that are not easily found elsewhere.
- ❖ For those who are interested, you can offer information about other astro-tourism experiences that they can pursue, either offered by yourself or by other places nearby. If the experience you offered was good, your visitors will recommend it to others.



6 DESIGN PLACES, STORIES AND OTHER ELEMENTS

Remember that small details make all the difference and that two experiences that are identical in overall design can still be very different and achieve very different levels of satisfaction, just because of the details they incorporate.

- ❖ Depending on your site requirements – whether indoor and outdoor – **focus on the architectural, interior design and furniture aspects**, either to create new spaces or to fit out existing spaces. Pay special attention to elements that are not usually seen in other buildings and that can help you to highlight the uniqueness of the experience you offer (e.g. a dome, a viewing terrace, a special room for thematic talks, etc.).
- ❖ Choose **equipment that is appropriate for the astronomical objects you plan to observe**. Remember, for example, that deep space objects require more powerful telescopes (and darker skies, of course).

- ❖ Opt for **low-intensity lights or coloured filters** to reduce light without affecting visibility and safety. Make sure that you do not produce light pollution that may impair observations, and at the same time, try to block any disturbing lights coming from outside.
- ❖ Consider **providing a theme to your facilities**, such as giving them an astronomical character by using images (e.g. old astronomical engravings, astrophotographs, etc.), names (e.g. naming hostel rooms after astronomers or constellations, etc.) or other decorative elements (e.g. printed bed covers with full moons, etc.).
- ❖ Based on the themes defined in step 5, **research the required information and design the specific stories** to be communicated by the guide or other mediators and those that are to be communicated through other informational material. For panels, signage, models, videos and/or other elements, work on the graphic and audiovisual design required. Alternatively, you can choose informational material developed by others, mainly organisations involved in astronomy outreach.
- ❖ Consider using some form of uniform or distinct identifiers for your staff, which will make it easy for visitors to spot you and lend an air of greater professionalism.
- ❖ If your target audience includes foreigners, make sure that you have guides who are fluent in multiple languages (English or others) and that you have the essential informational material also in the required languages.

7 IMPLEMENT YOUR EXPERIENCE



Once the design is complete, it is time to transform it into a reality by carrying out all the required physical infrastructure work and arranging for the people who will play a role in the experience.

- ❖ **Execute the plans** related to architecture, design, furniture, equipment, content development, and design and/or acquisition of informational material. Pay attention to every detail, knowing the difference it can make.
- ❖ **Select your staff**, paying special attention to the astro-tour guides as their quality will significantly influence the satisfaction of your visitors. Make sure that they have the required astronomical knowledge, they can express themselves in a clear and entertaining way, they are able to answer questions, they know how to motivate visitors, they are friendly and they have good group management skills. Once you have selected them, it is crucial that you clearly explain the objectives of the experience and motivate them to do their best.
- ❖ Conduct a dry run, with the purpose of identifying flaws and correcting them. To do this, first inform your audience that you are at the trial-and-error stage. This way, you can avoid mistakes that could damage the reputation of your offer.
- ❖ Consider building partnerships with other providers. There will be some things you do better and some things you do worse. Concentrate on doing the former, and for the latter get into agreements with suppliers who can do it better than you. For example, if promotion is not your speciality, contact local tourist agencies that can take care of it. Or if you don't have technical knowledge, hire someone who can handle equipment maintenance.

Once you have made the necessary adjustments, you can start operating normally, bearing in mind the following:

- ❖ Even if your guide is prepared, they are not obliged to know everything. Even less so in the inexhaustible field of astronomy. However, when they are asked a question that they do not know the answer to, their reaction can make a big difference. It is advisable to accompany the “I don’t know” with a promise to find out and answer the question later or by email.
- ❖ Try to stick to what you have planned, but also **allow flexibility** to adapt and react to what happens.
- ❖ Maintain coordination between activities. Remember that the experience should flow smoothly. Pay special attention to the above if your experience is developed by more than one guide. Their speeches should be aligned and should not repeat information that has already been shared.
- ❖ Remember that an experience is more than a service. **Pay attention to every detail** and, **above all, to the reactions of your visitors**. Try to help each of them live their own unique and memorable experience. And keep in mind that everyone has their own rhythms and preferences for engaging in an experience. Take care of visitors’ comfort: offer warm clothes, hot drinks, comfortable seating and don’t prolong the experience until the first yawns appear.
- ❖ Give space for the visitors to interact with each other, as this can be a very relevant part of the experience. Their conversations will help the shy ones to integrate.
- ❖ Resist the temptation to “over-serve” by overwhelming your visitors with interventions from your guides. Leave space for their reactions and preferences to emerge.
- ❖ If you are going to set up the experience in several languages, try to generate separate experiences. Live translations of a guide’s speech can be confusing and tiring. Remember to translate videos, signs and leaflets as well.



8 ACTIVATE YOUR PROMOTIONAL PLAN

Naturally, all the effort you have made so far needs to be showcased to the visitors. As already mentioned in the “preparations” section of step 5, having a website is the minimum requirement. It is also good to have a brochure, which often has multiple uses. For one, it allows satisfied visitors to recommend your experience to others.

- ❖ Describe the experience you are offering accurately, **by highlighting what is unique and special about it**. Refer to the main actions involved and the feelings they produce in visitors but remember not to tell everything and save some surprises for the visit. Compare your communication with that of your competitors and make sure that your positioning in relation to them is exactly what you want it to be.
- ❖ Share information about the route, accessibility, likely temperatures and possible complications associated with altitude, if applicable. Suggest appropriate clothing and detail whether the experience is suitable for children and of what age.
- ❖ **Avoid creating false expectations** such as, for example, those that are

often triggered by the indiscriminate use of spectacular astrophotographs. These may lead many visitors to believe that they will see such images in the tourist telescope, which, as we know, will not be the case. Instead, use images of people enjoying what you are offering. This will better communicate that it is an experience and not just a service (typically illustrated with pictures of infrastructure).

- ❖ If your target audience includes international tourists, have at least an English version of your website.
- ❖ Choose the most effective promotional channels to reach your target audience. If you are targeting school children, promote yourself in educational establishments; if you are targeting foreigners, prioritise the internet and/or international agencies; if you are targeting couples or families, hand out flyers in places they frequent, etc.
- ❖ The importance of travel-based **social media channels** in the travel industry is growing every day. If you are not on social media and you are confident in what you offer, sign up at least on TripAdvisor. This will make you visible to many people, although you should also be aware that it will leave you exposed to public criticism. For the same reason, take special care to respond to negative comments, never disputing your visitors' version (let alone reacting angrily), acknowledging mistakes and weaknesses where appropriate and explaining the steps you are taking to correct them. Even if you have received a bad comment, a visitor's perception can improve if you show interest and openness to their opinion.



9 EVALUATE AND CORRECT

Designing your experience is a process that you should never consider completely finished. Even if you have done well, resist the temptation of complacency, because the secret to staying competitive is to always keep evaluating and making improvements. And the needs, tastes and expectations of your visitors will continue to change over time.

- ❖ Maintain high standards: **Being self-evaluative is necessary to drive further improvements.** In addition, setting high goals can lead to higher motivation and, in the long run, better results. Evaluate your experience in broad terms, but also in parts and pay attention to the details.
- ❖ Give special importance to the feedback received from those who have participated in your experience: your visitors. Collect them through a short satisfaction survey and also through close monitoring of the comments made about your experience on TripAdvisor and/or other travel social media networks.
- ❖ Combine this with your personal evaluations and those of the people you work with.
- ❖ Your corrections can include changes to the script of the experience, to the location, to the role of the guide, to the design of the informational elements and, in short, to any element of your experience. Just make sure you involve your guides and other mediators as much as possible in both the design and the implementation of the improvements.

LATEST



TRENDS

Experience design is a dynamic field, where innovations are constantly being developed. Here is a brief introduction to some of the latest trends to spark your imagination about the elements you could incorporate into your design. Now or later.

Immersive Experiences: **USE ALL YOUR SENSES**

It is no longer enough to simply observe, visitors want to smell, touch, hear, feel, etc. According to a consumer trend study¹⁴, conducted in the USA and UK in 2014, more than 70% of the consumers want experiences that stimulate their senses. It is in response to this need that multi-sensorial experiences are being designed. The first step in this direction may include, quite simply, a careful choice of music to accompany certain episodes of the experience. Another example is choosing particularly fragrant plants for a terrace site of an astro-touristic observation.

Creative Tourism: **LET'S GET TO WORK!**

Creative tourism offers tourists specialised learning experiences that are associated with the destination they are visiting¹⁵. Weaving your own basket under the guidance of experienced craftswomen or cooking a dish according to the traditional local recipe or taking your own astrophotographs are just some of the countless examples of this type of experience. According to several studies, creating and learning are part of the same process. And few experiences are more immersive and satisfying than an authentic learning experience, from which we take away not only a memory but also new knowledge or a new skill. It is an unforgettable experience for travellers who value engaging with their environment and want to go beyond knowing or merely being passive spectators.

¹⁴ JWT. (2014). *Trends Report*.

¹⁵ Richards, G. & Raymond, C. (2000). *Creative Tourism*.

Gamification: **LET'S PLAY!**

Some organisers design their tourism experience as a game, with objectives, scoring systems and rewards, which can increase visitor engagement. Such an approach ultimately generates high satisfaction and increases customer loyalty. In fact, there have been reports of visitors reliving the experience immediately after their first visit¹⁶. Typically, a playable experience includes a game mechanic (rules), an aesthetic (setting and symbolic meaning) and a dynamic (developing skills). By the way, motivation in these cases plays an essential role. If it is weak, the game can turn into a meaningless point-collecting exercise or lead visitors to resent scoring systems, such as those that ask for personal information.

Augmented reality: **THROUGH TECHNOLOGY**

Many tourism experiences are taking advantage of new technologies to enhance their experiences. This includes using smartphone apps to interactively explore tourist attractions, to display information and basically to take advantage of visitors' geolocation resources, internet connection, accelerometers, digital cameras and touch screens. In such cases, visitors relate directly to the "real world" but access a "virtual world", which enriches their experience¹⁷.

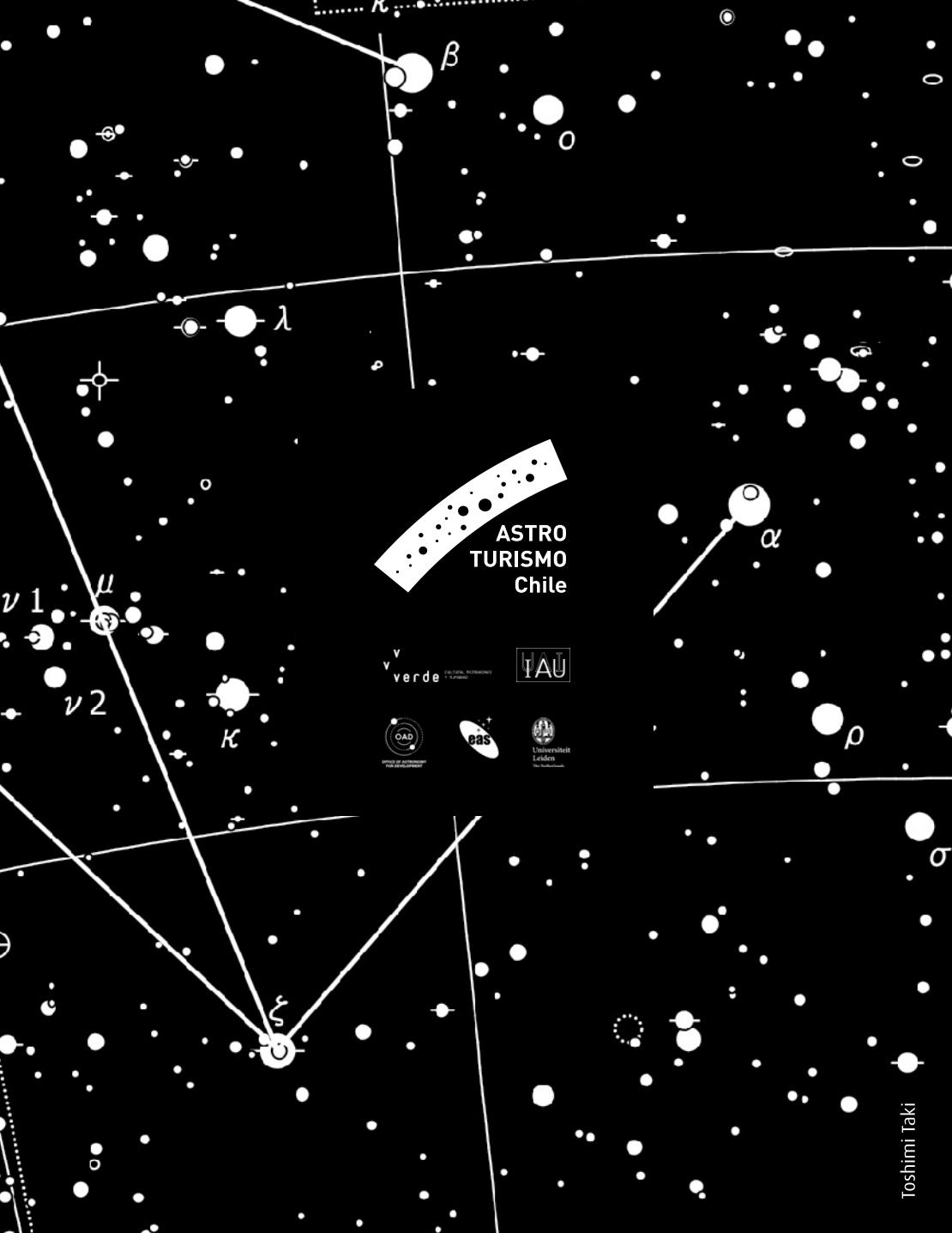
¹⁶ Xu, et al. (2014). *Gamification in Tourism*.

¹⁷ Linaza, et al. (2014). *Pervasive Augmented Reality Games To Tourism Destination*.

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