

# Adventure Physical Activities in Nature (APAN): Review of the Taxonomy (1995-2015) and Tables for Classification and Identification of Practices

**JAVIER OLIVERA BETRÁN**

National Institute of Physical Education of Catalonia - Barcelona Centre (Spain)

**ALBERT OLIVERA BETRÁN**

Secondary school physical education teacher

Founders of the 'Olivera Method' for smart motor behaviour

Corresponding author

Javier Olivera Betrán

[jolivera@gencat.cat](mailto:jolivera@gencat.cat)

## Abstract

This study is based on an earlier one (1995) containing a proposed taxonomic classification which we have now reviewed and updated according to the growth and emergence of these practices during this period. On an intrinsic level, we studied the purpose and nature of these activities and rethought and analysed the relevance and appropriateness of 'Adventure Physical Activities in Nature' (APAN) as a valid name to identify them. On an extrinsic level, we identified the APAN that are currently being significantly performed by part of the population worldwide and we restructured and completed the taxonomic classification of 1995 with the specific presence of a new emerging sector 'Fire' due to the increasing presence of practices that use the internal combustion engine. We built a table identifying each of the selected APAN practices and drew up a table of environmental impacts with four pollutant classifications. Finally, we developed a coordinate axis in which we link the degree of sportisation of the groups of practices with the 'asceticism/hedonism' variable. In the previous study we distinguished three major mediums, 'Air', 'Earth' and 'Water', with 6 groups (A), 13 groups (E) and 8 groups (W) respectively. In total, we structured 27 groups and we clearly identified 33 practices. In the current study we have four mediums, 'Air', 'Earth', 'Water' and 'Fire', with 5 groups (A), 12 groups (E), 8 groups (W) and 4 groups (F). In summary, we build 29 groups and we distinguish 98 practices.

**Keywords:** adventure physical activities in nature (APAN), taxonomies, sliding, natural environment, informational body, practices, postmodernity and transmodernity

## Introduction

This paper is a follow-up to our earlier study "Proposal for a Taxonomic Classification of Adventure Physical Activities in Nature (APAN). Conceptual framework and analysis of the criteria chosen" published in 1995 in the journal *Apunts. Educació Física i Esports* and included in "APAN: socio-cultural analysis" (No. 41, July 1995). This publication had a significant impact on the management of new alternative physical practices in active leisure time as it made a relevant contribution to identifying APAN as an original model, distinguishing them from the 'sport' model, and recognised them as a genuine contribution of postmodernity. The paper

revealed the intrinsic and extrinsic nature of these practices from a number of perspectives, helped to classify and describe the various activities that were taking place and made up this universe of activities and contributed to observing the various applications and services that were being implemented in our country. The study object of this paper is to analyse this set of activities again in the Information Society in post-postmodernity, which some call transmodernity, review our APAN taxonomic proposal from 20 years ago and propose an update based on the anthropological, social, technological, cultural and mindset changes in the thirty years since the emergence of these practices in Spain.

Our previous paper began with a question: “Is the growing taste for adventure sports a fashion?” At the end of that article we argued that APAN were becoming established in active leisure time and although they were going through an internal natural selection process, they were contributing to the growing development of adventure tourism in the increasingly crowded natural environment (Olivera & Olivera 1995b). From those disjointed practices that were conducted more or less spontaneously in certain natural areas using the free power of nature (gravity, river, sea, wind, waves) we have now moved to significant growth and structuring of the business sector; specific legal regulation with specific qualifications; the emergence of industry organisations and associations that bring together, publicise and promote these practices; an exponential increase in practices through constant technological resources applied to new activity designs; and extraordinary dissemination thanks to ubiquitous information technology. During this time these practices have made a growing contribution to the GNP of the leisure sector worldwide, the subsequent creation of jobs and an equally exponential increase in users who as part of active leisure time and tourism carry out these activities anywhere in the world attracted by a successful strategy: bespoke adventure, nature and fun in the company of their friends and families to escape from certainty and routine and have a flow experience.

We used an evolutionary study method involving a comparison between the position of these practices twenty years ago and their intrinsic and extrinsic situation today. From an intrinsic standpoint we studied

the purpose and nature of these activities over this period, observed the influence of the sports system on them through the process of sportisation and analysed contemporary participation models and the impact they have on the environment. Based on this we rethought and analysed the relevance and appropriateness of calling them APAN as a valid current identification name.<sup>1</sup>

Our concern about the ecological impact that some of these activities may have on the natural environment led us to produce an environmental impact table. Finally we drew up a coordinate axes chart in which we related the degree of sportisation of the groups of practices with respect to the hedonism/asceticism axis.

With the perspective afforded by these past two decades we can categorically state that APAN have become established in transmodernity as a genuine universe of emerging practices in active leisure time which are alternatives to the sports system, are known and demanded by large and diversified sectors of the population anywhere in the world, and are now undeniable practices of our time.

### **From postmodernity to transmodernity: a review of APAN**

APAN arose spontaneously in the 1960s but emerged and grew in the 1970s and 1980s in developed countries<sup>2</sup> (mainly in California in the USA and hence one of their first names was ‘Californian sports’) and became consolidated in the 1990s. They were supported by technology<sup>3</sup> which allowed people

<sup>1</sup> In the first half of the 1990s there was an enormous range of terms used to identify these practices institutionally, in associations and created by various authors. With the publication of our paper in 1995 we coined the semantic designation of Adventure Physical Activities in Nature (APAN). In our paper we argued that this name and acronym were suitable to identify these activities given the relevance and justification for each term and the clarity and significant strength of the whole. Twenty years later the term has become widely accepted in Spain and Latin America and has been used by authors, associations and institutions in key studies of sports habits (García Ferrando, 2006), articles, books, papers and doctoral thesis titles, yet it has not definitively prevailed and today this terminological diversity continues to exist.

Irrespective of whether one or another terminology is used, we believe that the word ‘sport’ should not be included in a denomination that seeks to group and identify these practices due to its connotations and the different nature of APAN.

<sup>2</sup> In Spain these practices emerged in 1985 with the first rafting descents of the Noguera Pallaresa river in Catalonia, but there is also evidence from local people that previously there had been descents of rivers and canyons in the Sierra de Guara (Aragon), mostly by French people doing canyoneering. In December of that year the 1<sup>st</sup> International Symposium was held in Tignes (France) under the general title “La Glisse” (Sliding) entirely about new adventure practices in nature, initially called ‘New Sports’, which sought different types of sliding by different means provided by the natural environment (air, earth, water, ice, snow) and taking advantage of the free power of nature by using technology.

<sup>3</sup> Technology brings feasibility, efficacy and safety to these practices, which makes it possible to have symbolic or imaginary adventures. Technology enables sliding across new and extremely varied surfaces with proven efficiency, fun and safety. Engineering has designed new mechanical devices that with relevant safety parameters improve the performance of sliding, facilitate greater enjoyment and enable the search for limits. New apparatuses emerge to tackle new experiences, new challenges and limits on physical planes or on the mixture of planes (air/water; air/earth; earth/air), with this concordance of planes being the trend of the most emerging APAN in recent times.

to slide across various new natural mediums of water, land and air to have unique emotions, fulfil ancient dreams<sup>4</sup> and survive the experience (safely). They were based on the spirit of postmodernity, i.e. on the consumerist culture that led to a narcissistic hedonistic individualism which rather than an ethic was an aesthetic (Olivera & Olivera, 1995a). This combination of technology, sliding across the various areas of nature,<sup>5</sup> fun adventure and hedonistic narcissism turned them into genuine alternative practices of postmodernity that were created as a reaction to modernity and emerged according to its models, values and practices.

APAN are activities whose motor basis is sliding which takes advantage of the free power of nature by using technology; they are not based on training or seek performance and the body is not a means but rather the final depository of the emotions and sensations generated. They belong to another ecological-hedonistic body model which is very different from the ascetic body model of sport (Olivera & Olivera 1995a, p. 25). Their essential elements are (rural and urban) nature, vertigo, controlled risk, excitement, pleasure, fun and, in short, adventure that is available to all but distilled individually according to personal expectations and regardless of sex, age or level (Olivera, 1995).

When we say 'nature' we mean the environments and settings where APAN are done. Their setting is the natural environment as they come from the ecological paradigm and their spirit is contact with the natural environment through applied technologies which make it possible to slide through a range of natural ecosystems. Yet they are also conducted in urban nature, much closer and nearer to people today, a stable nature in which risk<sup>6</sup> and adventure interrelate with the rebellious and transgressive spirit

of a sector of the young urban population who use them as personal and collective affirmation and as a countercultural reaction against established habits and rules prohibiting the appropriation by the population of public and private urban spaces. APAN are symbolic practices that bring together one or more urban tribes, each with its genuine interpretation of the body and its attitudes thus generating interaction and rivalry between them. These practices in urban nature are also APAN as their requirements are met because they interpret adventure as tribal transgression and identification; they belong to the spirit of transmodernity and that is how we approach them in our taxonomy.

Adventure in APAN depends on the expectations of the person concerned, their previous experiences and the experiences they have in an uncertain activity in a semi-structured natural environment. These practices invite people to have an extraordinary experience, that is to say an adventure that is nonetheless an 'imaginary adventure' (Feixa, 1995),<sup>7</sup> in direct contact with nature and also fun. The practitioner mentally prepares, gets ready to have a unique experience, is subjected to the ritual of the activity, to a true rite of postmodern initiation, anxiously seeks out adventure and builds their story to tell their 'adventure' to others. The strictly individual practice, albeit done in a group, brings about different sensations and emotions in each person which based on its unprecedented nature, intensity and originality will to a greater or lesser extent nourish their particular experience of the adventure. The imaginary or symbolic adventure of sliding through nature constitutes an essential element of APAN that identifies and distinguishes them from other practices.

The body in these practices is not a means to achieve something outside it but rather an end in

<sup>4</sup> Humans' ancient longing to fly like birds, move in water like fish, slide supported by wind or access the remotest corners of the earth.

<sup>5</sup> The need to get away from the urban environment, escape from everyday life and reconnect with a free natural environment that is sparsely populated and not degraded to enjoy nature is a postmodern need in line with the ecological paradigm. The postmodern individual gets away to nature to feel free, find peace and enjoy the harmony of nature.

<sup>6</sup> The uncertainty of urban nature associated with risk is not the result of the irregularity of the territory or the ability to respond to changing weather conditions, but rather is an uncertainty based on multifactorial vectors that the practitioner has to be able to read and carry out with motor intelligence and efficiency – calculating distances, angular vision, drop calculation and balance of the body – to achieve increasingly complex and original skills, abilities and acrobatics (interview with Vicenç Cánovas, 06.04.2016).

<sup>7</sup> The same practice may entail a real feeling of risk for some while for others it may be unexciting, although all practitioners seek to live 'their adventure'. Adventure in APAN does not come strictly from practical experience but rather from its imaginary or symbolic dimension since adventure is a stage for controlled management of emotions, where the actions of the practice are subordinated to perceptions and the real risks to imaginary dangers.

itself, the final repository of all the sensations and emotions that the practitioner experiences during the process. As they are practices that seek excitement and fun, the body will be the ultimate recipient of these sensations. Here we mean an informational body, or to put it another way one that provides information when performing the activities and in turn takes in information from others and the environment; it is not an energetic body like in sport but instead a body that lives intense emotions in contact with nature through technology that dovetails with the habits and values of the Information Society. Yet it is also a body that seeks to reach the limits in extreme adventure and although the body is the vital and substantial hub of the activity, it ceases to be so when the proposed goal escapes the possibility of the subject, body awareness is distorted and survival itself is questioned (Bücher, 2014).

The commercial network that spontaneously emerged through the founding of small businesses that promoted and offered various APAN practices to the public has been instrumental in the consolidation of this sub-sector of tourist services in active leisure time and has furthered its exponential growth over the period we are studying. The presence of this APAN business community has increased the safety of the practices, reduced levels of uncertainty while maintaining the sense of controlled risk in the various activities and fostered new practices. It has also generated jobs, contributed to the economic recovery and revitalisation of depressed areas in various natural environments, generated economic wealth and structured the industry's offerings. Institutional organisations have produced specific legal regulations for using and accessing the natural environment which, in spite of always playing catch-up with the

activities, aim to regulate these practices, promote the sustainability of the territory and protect users. The growth and diversification of APAN has been accompanied by the growth and consolidation of the business community in their sector; both parameters have fed off each other and made a crucial contribution to their emerging presence in active leisure and tourism time.

Thus as Postmodernity reacts to Modernity and transgresses some of its greatest myths leading the individual towards relativism and subjectivism: reason decreases and sentiment prevails, it denies sacredness and welcomes secularisation, rescues 'present' time over the past/future contradiction, empowers the individual over the collective, information over production, sliding over the energetic, neo-sports over sports or new APAN practices over sport. In the 21<sup>st</sup> century Transmodernity<sup>8</sup> has succeeded Postmodernity and in this process the trends of postmodernity transform and merge with modernity; we might say following Hegel that the evolution of the three stages corresponds to a process of thesis, antithesis and synthesis. Our time is dominated by virtuality, chat, social media and internet, instantaneity, the risk society, charitable individualism, the cyborg body and the desire to live to the fullest. Furthermore life is interpreted as a unique and unrepeatable vital process that must be absorbed with passion and complete dedication without fearing the outcome of death because this is part of life (Zeba Produccions, 2014). During transmodernity we find the 'burnout society' (Chul-Han, 2012)<sup>9</sup> which is a society of self-appointed performance in which the incessant need for power ('power to do something') in which the self is the slave and master once, as 'the other' has disappeared as an enemy and rival. In

<sup>8</sup> Features of the 'Modernity'/'Postmodernity'/'Transmodernity' periods according to Rodríguez-Magda (2007): Reality-Simulacrum-Virtuality; Presence-Absence-Telepresence; Homogeneity-Heterogeneity-Diversity; Centrality-Dissemination-Network; Temporality-End of History-Instantaneity; Reason-Deconstruction-Pensée unique; Knowledge-Sceptical Information-Antifundamentalism; National-Postnational-Transnational; Global-Local-Glocal; Imperialism-Postcolonialism Transethnic-Cosmopolitanism; Culture-Multiculture-Transculture; Telos-Game- Strategy; Hierarchy-Anarchy-Integrated Chaos; Innovation-Security-Risk Society; Industrial Economy-Postindustrial Economy-New Economy; Territory-Extraterritoriality-Transborder Ubiquity; City-Suburbia-Megalopolis; Race/Class-Individual-Chat; Activity-Exhaustion-Static Connectivity; Public-Private-Obscenity of Intimacy; Effort-Hedonism-Joint Individualism; Spirit- Body-Cyborg; Atom-Quantum-Bit; Sex-Eroticism-Cybersex; Masculine-Feminine-Transsexual; High Culture-Mass Culture-Customised Mass Culture; Vanguard-Postvanguard-Transvanguard; Orality-Writing-Monitor; Work-Text-Hypertext; Narrative-Visual-Multimedia; Cinema-Television-Computer; Press-Mass media-Internet ; Gutenberg Galaxy-McLuhan Galaxy-Microsoft Galaxy; Progress/Future-Past Revival-Final Fantasy.

<sup>9</sup> In our society there is a dialectic of positivity and not a dialectic of negativity as in the past. This positivity of the individual entails an excess of narcissistic ego that leads us to search for ultimate self-realisation, to our limits, and takes us to neuronal violence, to the Burnout Society.

this circumstance one lives for work or one's passion without the boss asking for it and one demands it of oneself, one becomes self-disciplined and competes especially with oneself. Overwork and performance are worsened and become self-exploitation. Living in the fabric of mandatory freedom leads to burnout and a 'state of neurosis'<sup>10</sup> which can plunge one into depression and despair (Chul-Han, 2012). Seeking the limit brings the new challenge and is one of the key factors that identify our time: be you to the utmost, be non-conformist and live at maximum intensity, the maximum secure risk, experience the adventure again and again playing even with death (Zeba Productions, 2014).

Under the protection of this transmodern 'burnout society' APAN give the individual the opportunity to be unique and nonconformist and live the maximum experiences (adventures) possible at the highest level of their expectations, supported by the relentless growth of technologies that multiply practice options, which appear as if they were fashions in which some settle and others disappear. However, in our time APAN attitudes and practices coexist with the postmodernist spirit and other more emerging ones fuelled by the genuine transmodern spirit. A relevant example of the settlement of this universe of practices is the growth and diversification of the ages and sectors of the public who do them. Thus while in 1995 we found that APAN were popular mostly among young people (aged 15-35), nowadays these practices reach a broad population segment with greater impact among younger and older people. As a result we have identified the various participation models based on each participant's expectations, which has led us to

identify three main participation models: educational, recreational-tourism and extreme adventure.<sup>11</sup>

'Extreme adventure' practices come under the lifestyle sports marketing concept, an emerging and fashionable industry that thrives on two groups of practices: some conventional sports and alternative APAN practices. The merger of the two groups gives rise to 'extreme sports' that take place in different areas and have five essential dimensions (Tomlinson, Ravenscroft, Wheaton, & Gilchrist, 2005): spatial (remote locations, wilderness, places with great uncertainty); extreme emotional states (states of shock, high intensity excitation); transgressions (going beyond the established norm, including social norms); extreme skill requirements (they require very precise calculations, dosing and control of effort, remarkable technical expertise, checking time, forecasting the weather and emotional control), and high risk (the key identification factor as it offers the possibility of experiencing an extreme adventure).

These real high risk activities are accompanied by a range of types of advertising promotion, sector television stations,<sup>12</sup> companies that have made these practices into the banner of their trade promotion<sup>13</sup> and broadcasting of specific events (Urban Games, National Adventure Sports Weekend and the eXtreme Games) which have greatly contributed to interest and development in this field. Extreme adventure practices perfectly connect with the spirit of transmodernity because they offer the individual in the burnout society, with its neuronal violence and state of competitive neurosis (Chul-Han, 2012), an opportunity to seek their limit, attain the freedom to escape the world of regulation and certainty, opt for personal excellence through

<sup>10</sup> Excessive competitiveness self-generated by the individual promotes this state of inner neurosis that feeds back to a society which is already very competitive. This condition often causes mental imbalances and sometimes the personal challenge of maximising performance intertwines with death itself (Chul-Han, 2012, pp. 11-23). Neuronal diseases, depression, attention deficit hyperactivity disorder (ADHD), borderline personality disorder (BPD), occupational burnout syndrome (OBS) and others have become the biggest health problem of our time, with rates that indicate a major global pandemic. Furthermore, suicide is increasing in our time and is the leading cause of unnatural death in Spain with 3,910 deaths in 2014, the highest figure since the start of official statistics 25 years ago. The WHO estimates that the number of people who kill themselves worldwide will rise to 1.5 million by 2020.

<sup>11</sup> In the 21<sup>st</sup> century 'extreme sports' or 'extreme practices' have become established resulting in the buzzword 'lifestyle sports' that transcends the actual practice to engage the individual in personal factors going beyond the activity and refers to the individual's need to seek the limit by flirting with death itself. It includes a wide sub-taxonomy of practices, some of which are extreme. In our taxonomy we have included this sector in 'Extreme Adventure'.

<sup>12</sup> It is the leader in its sector and has remarkable ratings on the US 'alternative sports' television network ESPN that promotes the eXtreme Games (ESPN's eXtreme Games)

<sup>13</sup> The energy drink Red Bull has gained in recognition by sponsoring a large number of 'Extreme Adventure' events, sponsored extreme displays of these activities and even sponsored a remarkable cast of excellent practitioners with a recognised reputation in the sector to help them achieve higher goals, 'impossible' records or unprecedented achievements. See 'The Dark Side of Red Bull' by H. Büchell (2014)



superior achievement, join a community of individuals who share their tastes and connect by an emotional or experiential link with a place, a time and nature itself (Quester, Beverland, & Farrelly, 2006).

In this study we have identified, described and classified all those APAN active practices which are being promoted, offered and conducted at present anywhere on the planet and which have a volume of news and information on social media and internet and other relevant media. We have separated out practices which by their nature and purpose meet the requirements of the APAN we have previously justified, irrespective of our moral affiliation or environmental respect as we are acting as social observers. In this identification we have respected the name of the practices by which they are known and globalised; most of these names are in English, and although there have been laudable attempts to render them in Spanish, versions in the latter language are sometimes the result of the zeal of scholars and are not labels or names used by practitioners, social media, the mass media, Wikipedia and the internet to identify them.

## New APAN taxonomy

Building on the taxonomy of 1995 in which we addressed the three major mediums or environments, we now add a fourth element, 'fire', based on the theory of the four roots of Empedocles (490-430 BC) which he uses to explain and justify the basic elements of matter (nature) by their status<sup>14</sup> (Hart-Davis, 2013).

In our previous study we distinguished three major environments, 'Air', 'Earth' and 'Water', with 6 groups (A), 13 groups (E) and 8 groups (W) respectively. In total we identified 27 groups and clearly distinguished 33 practices (Olivera & Olivera, 1995b). In this study we add 'Fire' due to the increasing presence of practices using the internal

combustion engine and its growing use by users. So we now have four environments, 'Air', 'Earth', 'Water' and 'Fire', with 5 groups (A), 12 groups (E), 8 groups (W) and 4 groups (F). In sum we identify 29 groups and distinguish 98 practices.<sup>15</sup> The fourth medium, 'Fire', is now firmly established with ever more sophisticated, bold and individualised motorised gadgets available to a large part of the population due to technological access, range, manoeuvrability and price. Practices resulting from the four environments have increased threefold up to 98 practices which we have detected, identified and described. They are activities which are known, reported, globalised and done by a significant part of the population in a variety of ecosystems anywhere around the world and are driven by specific or tourism industry companies that offer them.

Next, we describe and justify the dimensions that make up and structure this taxonomic table:

1. *Physical environment.* We define this as the place or space in which APAN are done and the degree of uncertainty that their practice may generate related to the influence of intrinsic physical and environmental factors (weather, conditions of the habitat or natural space, sudden changes in the conditions of practice, etc.) that affect or may interfere in the activity itself. We start from three basic environments that condition and determine the practice itself and which in turn determine a more accurate classification based on the criteria we define: the medium, the plane and uncertainty. Depending on the medium in which the APAN are performed we can distinguish the four basic elements: air, earth, water and fire. The plane across which the practitioner slides and determines the action of each of the APAN and is very directly related to the environment may be *horizontal* or *vertical*. We make a difference between whether the fall or slide occurs gradually or

<sup>14</sup> According to the Greek philosopher and scientist Empedocles, all matter is composed of four elements, fire, air, water and earth, which are united and separated by the personified cosmic forces of love and strife. In his view earth (solid) is cold and dry, water (liquid) is cold and wet, air (gas) is hot and wet, and fire (plasma) is hot and dry.

<sup>15</sup> To these 98 practices we can add 11 more techniques from the matrix which we have also identified but have not reflected directly in the taxonomy, which would total 109 selected and identified practices.

**Wingsuit flying.** Gliding while dodging and crossing natural obstacles at high speed is the proximity technique.

**Mountain bike.** Different types for free and competitive practice such as *downhill*, *enduro bike*, *trail*, *cross country* and *freeride*.

**Downhill skiing.** Snow technique with a kind of bike jumping over obstacles called Snowbiking.

**Climbing.** Different forms of climbing: *rock climbing*, *big wall*, *climbing wall* and *deep-water soloing*.

suddenly in the air environment (fly/fall); whether on land (horizontal/vertical plane) it has a slightly inclined plane, or if this is irrelevant, or conversely the descent is pronounced and control of their body and the device with respect to gravity depends on the skill of the practitioner due to the verticality of the activity.

In the *water environment* we distinguish in turn between activities carried out at sea or on a lake (horizontal) and river ones (vertical), meaning that even though the river at its source has a more inclined plane than near to where it flows into another river or the sea, there is a progressive and continuous descent and that moreover its flow rate expressly conditions the performance of the practice depending on the season.

Finally *fire*, because it can generate power through burning fossil fuels, does not require the help of other types of power provided by the natural environment (wind, gravity, river, etc.) or self-generated power to carry out the practice and its practices can even ignore or defy the free power of nature and are thus conducted mostly in a horizontal medium.

The third criterion we defined and included in the classification within the physical environment is *uncertainty*. In APAN this means the practitioner's ability to know and predict the response of the medium during the performance of the activity based on which they can interact with the environment more precisely depending on the degree of emotions and sensations they want to experience. Despite the variations offered by nature, the practitioner can 'control' the medium. For example, air activities would all be stable as the weather factor (high winds, rain, snow, etc.) would condition the performance or otherwise of the practice, but in stable (and measurable) conditions the activity would not present any uncertainty in itself and the medium would be controlled. By contrast, unstable ones whose response from the medium is unpredictable condition the practice itself (such as surfing or rafting due to changes in sea or river currents) and would be one of the factors that would bring the emotion that the practitioner seeks, with this uncertainty being an attraction and a nec-

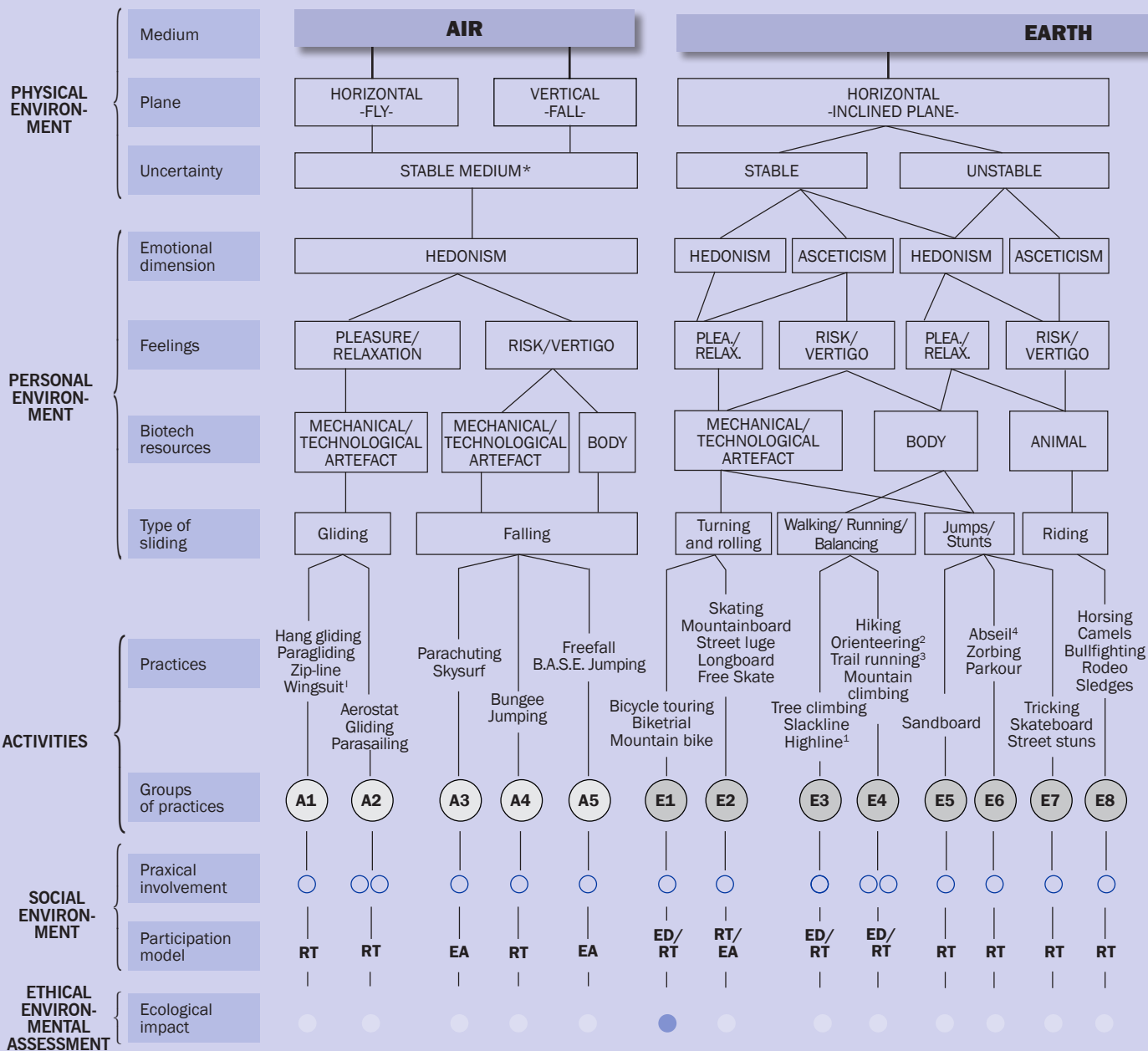
essary condition for the challenge that they aim to achieve.

2. *Personal environment*. This is classified into four categories depending on how the practitioner approaches the performance of APAN based on the psychological factor. Personal emotions, feelings and experiences related to the relationship with the environment, the features of the practice, interaction with the materials or artefacts used to carry it out through the appropriate ritual and finally the personal adventure and imaginary experience, often more fictitious than real. In the *emotional dimension* we make a distinction between activities that are 'hedonistic' in which doing the activity calls for low or medium energy use and allows the practitioner to enjoy the practice in a more or less relaxed way, and 'ascetic' activities which require high energy use but the effort made, although it may hinder, is not incompatible with the enjoyment of the activity. In assessing the dichotomy of feeling we confront two opposite ways of seeking pleasure depending on the degree of emotional intensity.

Pleasure/relaxation brings us serenity through harmony to enjoy the activity in all its glory in a prolonged and relaxed way. By contrast, if the activity is marked by inherent stress, even at times sudden and very intense, with high doses of emotional charge and a significant degree of uncertainty, then it would be considered as risk/vertigo. *Biotech resources* means the appliances, utensils, clothing, equipment or the body of the practitioner or of an animal which enables them to perform the activity adapted and devised to reencounter the greatest emotions the practitioner seeks to obtain. New technologies applied to the APAN have exponentially improved the devices of the 1990s providing more safety, more resources for practice, more precision to achieve the desired limits, greater feelings and emotions, new designs and applications and more polychromies.<sup>16</sup> The pleasure of controlled risk and the search for new challenges (and with some actual deaths in some cases) have attracted many practitioners who demand new limits, greater risks and unprecedented achievements.

<sup>16</sup> APAN are also an aesthetic show about the body and its values in which the image we want to project is designed to promote the beauty and harmony of these practices.

# ADVENTURE PHYSICAL



**KEY:** ED: Educational. RT: Recreational-Tourism. EA: Extreme Adventure. ● High Ecological Impact. ◐ Medium Ecological Impact. ◑ Low Ecological Impact. ○ Individual or Stable medium\*: We believe that all 'air/water (horizontal)' activities must be performed in a stable medium (predictable weather and uncertainty about the controllable means

**INCONSISTENCIES:** Highline<sup>1</sup>: Participation model 'Extreme Adventure' / Orienteering<sup>2</sup>: Practical involvement 'Group with collaboration' / Trail Running<sup>3</sup>: Practical involvement

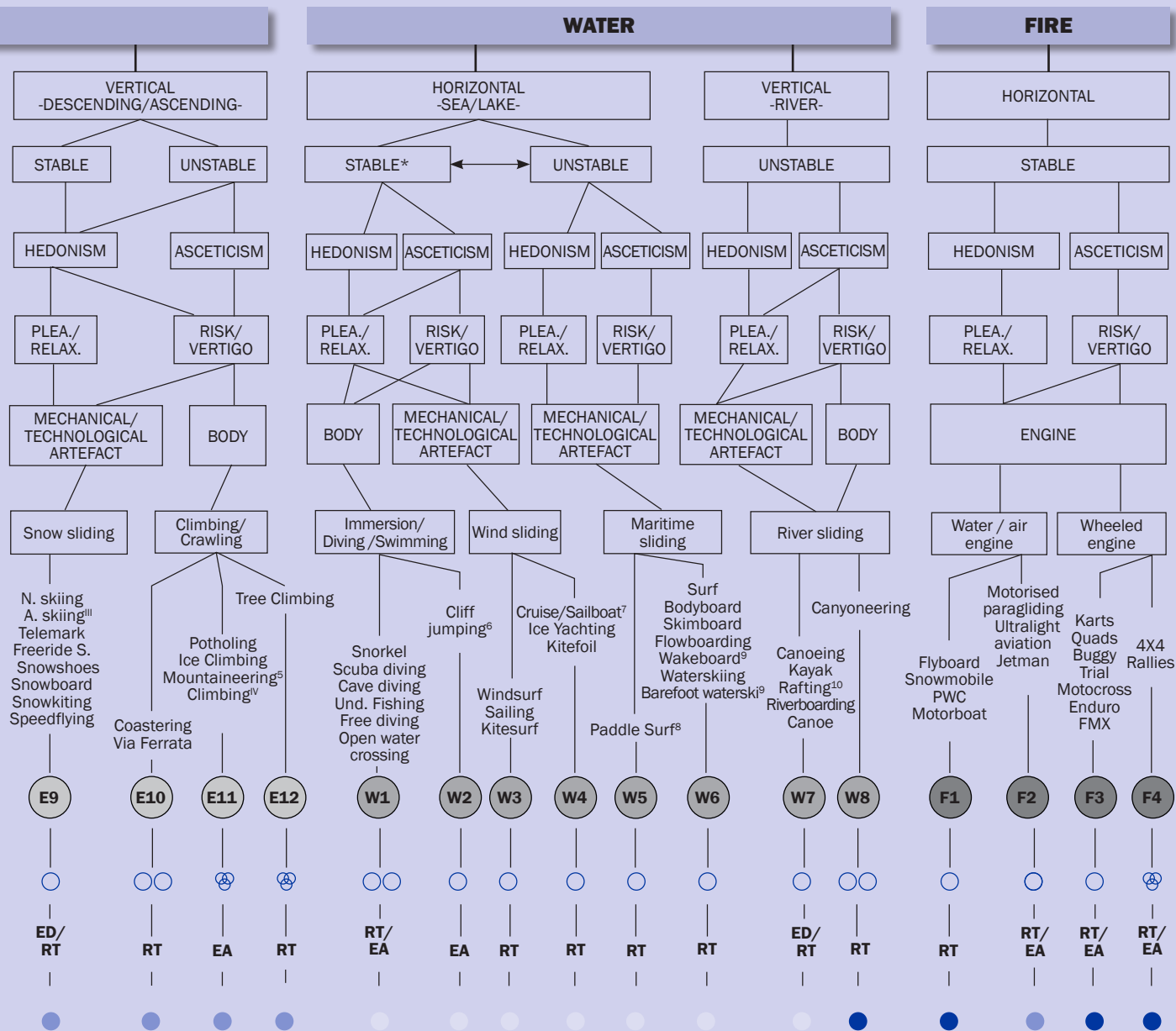
**CRUISE-SAILBOAT<sup>7</sup>:** Practical involvement mostly in 'Group with collaboration' / Paddle Surf<sup>8</sup>: Medium 'Stable' / Waterskiing-Wakeboard-Barefoot water ski<sup>9</sup>: High ecological

**TECHNIQUES:** Wingsuit<sup>1</sup>: flying: gliding while dodging and crossing natural obstacles at high speed is the proximity technique. Mountain bike<sup>10</sup>: different types for free and competitive different forms of climbing: rock climbing, big wall, climbing wall and deep-water soloing.

**Table 1.** Taxonomy of adventure physical activities in nature (APAN)



# ACTIVITIES IN NATURE



psycho-praxical. ○○ Group without collaboration or psycho-praxical in company. ⊗ Group with collaboration or socio-praxical. for the activity) as this is an essential condition for their practice.

'Individual or psycho-praxical'. Participation model 'Extreme Adventure' / **Abseil**<sup>4</sup>: 'Vertical' plane / **Mountaineering**<sup>5</sup>: 'High' Ecological Impact/ **Cliff jumping**<sup>6</sup>: 'Vertical' plane / impact / **Rafting**<sup>10</sup>: Praxical involvement 'Group with collaboration'.

practice such as downhill, enduro bike, trail, cross country and freeride. **Downhill skiing**<sup>11</sup>: snow technique with a kind of bike jumping over obstacles called Snowbiking. **Climbing**<sup>4</sup>:

We classify devices adapted to the user but which need the latter's energy and ability to operate (except in gravity ones) and designed to carry out the activity as a *mechanical/technological artefact*. By contrast, if propulsion power from the combustion of fossil fuels is needed to perform the activity while also being controlled by the practitioner, we define it as a *engine activity*.<sup>17</sup> If the fundamental power is self-generated by the practitioner himself and does not rely on an artefact, although equipment and materials necessary for the performance of the practice are used, we define it as 'body'.

Finally, we classify activities that need the help or support of an animal, or when the animal which takes centre stage in the practice itself, as 'animal'. The *type of sliding* is an important new feature compared to our study and classification of 1995. We thought it was very important to understand that the body features of APAN have enabled them to be implemented based on a certain type of more or less figurative sliding that influence the development and evolution of each one depending on the medium where it is performed. In some cases and due to the special features of the practice there may be some motor element intrinsic to each group but exclusive to each one that we highlight more precisely in the APAN identification and classification table. The 14 types of sliding include for air activities *gliding* and *falling*. For land activities, *turning and rolling; walking, running and balancing; jumps and stunts; climbing and crawling; snow sliding; riding and dodging*. In the water environment there are *immersion and diving; wind sliding (transport) and water sliding; maritime sliding; river sliding*. Finally, fire activities include *water/air engine propulsion* and *wheeled engine propulsion*.

3. *Activities*. We include 98 activities in the APAN praxis section, some of which have different types as they differ from the model of participation, the degree of sportisation or even the specific place of practice, bring different emotions and feelings and

are even catalogued differently. We have placed the 98 activities in 29 groups based on the features of each activity and the criteria outlined in the preceding paragraphs. We have gone from the 33 activities we analysed and classified in our 1995 taxonomy to the 98 that we have found and put forward in the current one. Consequently not only have practically none of the activities classified in 1995 disappeared and instead have weathered the passage of time by improving their performance and establishing themselves as practices that people want to do, but also 65 new activities have appeared which portend a splendid present and a hopeful future and will undoubtedly become established as a powerful emerging active consumer sector linked to the leisure industry (including riding out the global economic crisis) with the presence of sport very insignificant in most of them.

4. *Social environment*. APAN have a variety of aspects in terms of the interaction of the practitioner with the performance of the practice. While we have previously highlighted the different emotional dimensions or sensations experienced by practitioners, we also stress the social relations or implications that they have for carrying them out. In this section there are two classification criteria. Firstly there is *praxical or motor involvement*, which as in 1995 we subdivide into activities that can be performed alone without requiring others who can interact and which we define as *individual or psycho-praxical*; others which are usually carried out in company but whose presence is not necessarily required to perform the activity and which we define as *group without collaboration or psycho-praxical in company*; and finally those where a group of people have to interact and are necessary to perform and succeed in the activity are *group with collaboration or socio-praxical*. Here we have included a new aspect compared to our previous taxonomy which is the *participation model* that determines what the motivation, orientation and end are. We distinguish three main models. The *training participation model* may have a training and even a

<sup>17</sup> By engine activities we mean ones which are based on the classic internal combustion engine and are therefore highly polluting. However, there is a trend to use engines that help (self-generated power) or replace (self-propelled power) body activity and that run on batteries or electricity and even other types of power recharges such as solar energy batteries. The latter are the trend in the field of motorised propulsion. An example of this is boosted surf consisting of a surfboard which is fitted with a small engine that drives it when you catch the wave (there are various designs and powered boards by level) [www.jetson.es](http://www.jetson.es)

formal education motivation and orientation as some schools use APAN in their educational curriculum because they are interdisciplinary and/or due to the intrinsic educational values of the activity. Next are *recreational-tourism* activities which are designed to enable their practitioners to enjoy everything that the activity provides in which the practitioner seeks maximum emotions and sensations while doing the practice. We have differentiated between those that can be performed with a group of friends or family (*family-friends*) where a specialised company is normally used. In the same *tourism-recreational* group are *skill-risk* activities where practitioners, who are already knowledgeable about and have mastered the activity performed, experience and take APAN practices to a high level, often relying on their own equipment, materials and/or mechanical devices. Finally, the third group would be *extreme adventure* which includes practices where practitioners must be experts on the activity, recognised adventurers and/or people with large financial resources (or funded by companies interested in the sector) that take experiences to the limit with maximum emotions, extreme risk and challenge to vertigo thanks to the high-tech new materials and devices they provide and which take the practitioner to the boundaries of adventure.<sup>18</sup>

5. *Ethical-environmental assessment*. One of the motivations that practitioners of APAN value most in their interaction with the activities is the natural environment in which they are done in response to the ecological paradigm where urbanites generally seek to escape their lives (asphalt, pollution, monotony, etc.) to find the polychromatic colours that nature gives us and all that it offers. There is the paradox that these activities also influence and interact with the environ-

ment in which they are performed and have a sometimes vestigial and sometimes significant impact on habitats, wildlife environments or even population centres and other humans. We therefore believe that we need to take into account the ethical-environmental assessment criterion where we mean the *ecological impact* which each activity has on the environment in which it is performed due to their intrinsic characteristics.<sup>19</sup> While all of them influence the ecosystem, not all are highly degrading and hence we have established three categories to determine their degree of impact on the environment. Activities whose practice does not significantly degrade the natural environment are marked with a lighter shade.<sup>20</sup> The second group, indicated with intermediate shading, consists of activities whose ecological impact would be significant, while ones with a high ecological impact are represented by darker shading. Environmental impact may be environmental pollution as well as due to burning fossil fuels or engine activities, but also those that degrade nature through the widespread increase in practitioners and their influence on the environment<sup>21</sup> or the noise or visual pollution that may affect the habitats of certain species.<sup>22</sup> The influence and impact of such practices is very harmful to the ecosystem that hosts them.

## APAN tables and classifications

Over these two decades not only have the practices we analysed in 1995 survived, but they have been improved and many new ones have appeared based on the new technological resources grounded in the different cross variables that we include in our taxonomy and the industry's spirit of constant innovation. The flexibility of this universe of practices,

<sup>18</sup> The drama in deaths due to extreme adventure activities, such as the case of Álvaro Bultó, a well-known television presenter and someone who was passionate about APAN who died in Switzerland in August 2013 while wingsuit flying, increases the degree of emotion and attraction to the activity. These tragic events are spread and disseminated by the media and social media which further feeds and enhances the search for the limits of human beings in their attempt to master nature.

<sup>19</sup> We only include the activity itself, not the support equipment that is needed to perform the practice but does not directly influence it, such as a plane for parachuting or freefall or a speedboat for waterskiing or wakeboarding.

<sup>20</sup> Some APAN are conducted in an urban environment away from nature but nonetheless meet the common requirements of these activities. Hence their ecological impact is minimal or negligible and all of them are included in the least impact category.

<sup>21</sup> Canyoneering (descent of canyons) would be an example of contamination due to the large number of practitioners, where routes down rivers that are narrow in their upper reaches and canyons with a fragile environmental balance deteriorate and degrade after the continuous passage of hundreds of practitioners through the same place.

<sup>22</sup> The only family of bearded vultures living in the Mallos de Riglos (Huesca) has had to move to the Peña Reueba (a nearby massif) due to the large numbers of climbers who have chased them away their habitat and jeopardised the reproduction of their chicks.

which unlike the sports system allows all kinds of additions without regard to the entry rules or regulations or ordinances of any association or corporation, has certainly been conducive to this process. To this end we have created a table for identification and classification of the practices. The table identifies each of the selected (81) and analysed practices<sup>23</sup> based on specific criteria for each one and placing them according to the intersection of these two basic parameters: the type of sliding and power used (with 14 motor families covered) and the participation model with three main areas (Training, Recreational Tourism and Extreme Adventure). In addition we indicate the environmental impact of the practices depending on their medium (air, water, earth and fire).

We have also added two more tables to identify and classify the practices and practice groups into correlations with respect to environmental impact and the influence of the sports system (sportisation process) on the groups of APAN practices.

When specifying the location of each of the practices identified for their inclusion in a previously defined specific group, we found that the activity relates to one or another area, and therefore the location criterion changes and conditions its place in the table, depending on the purpose and the challenge that the practitioner intends to achieve with this activity.<sup>24</sup> The emotional dimension poses a similar quandary since depending on the sensation received by the practitioner the same activity can be interpreted differently depending on the experience, personal challenge and expectations generated by the person doing it.<sup>25</sup> Finally, the social environment can also provide different interpretations of the challenges facing each practitioner in the same activity. While most have a very definite praxical involvement, there are some whose practice can be performed in a psycho-praxical or

psycho-praxical in company way, in which case we have noted what for us would be the most common option.

The identification table has three fundamental axes for the location of the 81 activities we present which are grouped according to their intrinsic features. The relationship between the three determines the axes where the boxes of each practice are placed, each one of them spelled out according to the criteria outlined in the taxonomic table as well as the other information we consider pertinent to provide relevant activity data. The three axes on which the table is based are the *participation model*, the *types of sliding* and the *type of power used*, although the latter is not reflected in the above taxonomic table. The level of ecological impact that seems important to us is also present, but we set it out from a general perspective as in both the taxonomy and the subsequent ecological impact table we specify their involvement with the environment more precisely. However, generally speaking air activities have less environmental impact, land and water ones have a medium impact (with some exceptions) and fire ones would be highly polluting.

We analyse more precisely the different categories that we have indicated in the APAN identification table:

1. *Types of sliding*. This is at the top of the table because we believe that we can group the APAN based on the main body model developed during the performance of the activity. They all respond to the specific motor action that sets them apart and which we have already explained in the taxonomy. We have selected 23 motor behaviours distributed in 14 groups according to the sliding of each activity.

2. *Participation model*. This is in the horizontal rows of the table and refers to the level of

<sup>23</sup> The table shows 81 practices; not all of the 98 in the taxonomic table plus the 11 types are there as the intention is to identify the most significant and especially the most representative of each of the groups in the various environments.

<sup>24</sup> Downhill skiing taken as an example can be done from an education or training perspective and is even in the academic curricula of some schools due to its obviously pedagogical nature. However, it can also be done as a recreational-tourism option where a group of friends or family can independently enjoy a pleasant and fun activity. In addition, skiing can be done by experienced practitioners in an extreme form and in places outside the ones marked out at a ski station. This is the result of a broad and interpretive reading of the APAN identification table.

<sup>25</sup> Rafting is a good example of an activity that generates different feelings and emotions depending on whether you are doing it for the first time or are the expert instructor steering the craft.

motor involvement that the practitioner expects to find in the performance of the activity. In the first row we indicate the activities that we consider *training* (formal or informal) which have an initial level of difficulty or perceived risk and adaptation to the environment and can provide a suitable educational framework for the educational process. There are 11 activities at this level. The next level is *recreational-tourism* activities, which has the bulk of activities as befits its intrinsic nature with 56 activities, and where we draw a distinction between *family-friends* activities often carried out in a more relaxed, peaceful and friendly way, while *skill-risk* activities are at a higher level of motor involvement, training and experience of the practitioner and high doses of expectations based on adrenaline and high emotional arousal. Finally, the most demanding level is *extreme adventure* where the practitioner seeks risk limits sometimes with dramatic consequences, often sponsored by commercial companies to cover the costs incurred by the high cost of the practice. There are 14 practices in this group and all groups and types of sliding are represented.

3. *Types of power*. There are nine different types of power that directly influence the practice and which may be the free power of nature, ones produced by the practitioner himself or with the help of animals, or power from engines (in particular fossil fuel combustion engines). *Wind* power in the air and water environment is sometimes essential and necessary to practice the activity, such as when using a sail in the water environment, and on other occasions would preferably be absent so practitioners can glide or fly in a controlled way with devices that are sensitive to changes in wind speed, such as gliders in the air environment. In this same environment practitioners also need the *power* provided by *gravity* to experience the sensation of falling into the void which many demand due to the powerful emotions it generates. Many of the devices used for land activities require *mechanical* power whose applied force is transferred to the device that distributes and sizes it to meet the demand requested by the practitioner.

The next type of power covers the four land environment groups according to the type of sliding of

each body model in its motor action. They are *self-generated* power produced by the practitioner where, despite sometimes using mechanical materials or devices, the involvement of the body is necessary to carry out the activity successfully. *Animal* power is generated by the animals themselves to carry out the movement and balance and body collaboration of the person carried (the rider). The resistance of the water environment and its fluidity influence *underwater* power which affects activities carried out in the depths and the underwater habitats with which they interact; even the density of seawater impacts swimming or diving on its surface. *Marine* power is closely related to this and produces waves that are either essential to or interact with the practice. By contrast, if practices are conducted in rivers in the water environment, *river* power comes into play that enables faster or slower movement on the river's surface depending on the current generated and determined by the topography of the river itself, more vertical and steep near its source at summits and more horizontal and stable where it flows into other rivers or the sea. Finally there are activities whose primary power is generated by the combustion *engine* which enables practitioners to direct, steer and control the activity without the involvement of the other free power of nature, although in some of these activities the challenge lies in finding a balance between this power and the motorised device.

Finally, the identification table contains each of the 81 boxes that define the same number of activities representative of the groups between those showing greatest similarity. In each box we include the criteria already seen in the taxonomic table and specified for each activity such as the physical environment parameters (medium, plane and uncertainty) and the personal environment (emotional, feeling, biotech resources and types of sliding). In the type of sliding we have specified for each activity which is the most dominant of the group to which it belongs. We have also added in the box a number of icons that help better identify the most significant variables of the activity. Firstly, we mention praxical involvement (psycho-praxical or individual, psycho-praxical in company or socio-praxical). Then secondly we indicate the degree of *sportisation* where we refer to those activities that are regulated and homogenised to seek out their competitive side and adapt them to sport.



# CATEGORIES OF ADVENTURE

PARTICIPATION MODELS	TYPES OF SLIDING								
	GLIDING	FALLING	TURNING AND ROLLING	WALKING/RUNNING/BALANCING	JUMPS AND STUNTS	CLIMBING AND CRAWLING	SNOW SLIDING		
	1	2	3	4	5	6	7		
TRAINING	<b>ZIP-LINE</b> Flying Stable <b>A1</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Artefac <input type="radio"/> Gliding		<b>BICYCLE TOURING</b> Horizontal Stable <b>E1</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Artefac <input type="radio"/> Rolling	<b>ORIENTEERING</b> Horizontal Stable <b>E4</b> Asceticism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Body <input type="radio"/> Running	<b>ABSEIL</b> Vertical Stable <b>E6</b> Hedonism <input type="radio"/> Risk/Vertigo <input type="radio"/> Body <input type="radio"/> Jumping	<b>VIA FERRATA</b> Vertical Stable <b>E10</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Body <input type="radio"/> Climbing/Crawling	<b>SNOWSHOES</b> Vertical Stable <b>E9</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Artefac <input type="radio"/> Snow sliging		
	RECREATIONAL - TOURISM	Family-Friends	<b>BALLOON</b> Flying Stable <b>A2</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Artefac <input type="radio"/> Gliding	<b>PARACHUTING</b> Falling Stable <b>A3</b> Hedonism <input type="radio"/> Risk/Vertigo <input type="radio"/> Artefac <input type="radio"/> Falling	<b>MOUNTAIN BIKE</b> Horizontal Stable <b>E1</b> Asceticism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Artefac <input type="radio"/> Rolling	<b>TREE CLIMBING</b> Horizontal Stable <b>E3</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Body <input type="radio"/> Balance	<b>ZORBING</b> Horizontal Unstable <b>E6</b> Hedonism <input type="radio"/> Risk/Vertigo <input type="radio"/> Artefac <input type="radio"/> Jumping/Turning	<b>COASTERING</b> Vertical Stable <b>E10</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Body <input type="radio"/> Climbing/Crawling	<b>NORDIC SKIING</b> Vertical Stable <b>E9</b> Asceticism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Artefac <input type="radio"/> Snow sliding
Skill-Risk			<b>PARAGLIDING</b> Flying Stable <b>A1</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Artefac <input type="radio"/> Gliding	<b>BUNGEE JUMPING</b> Falling Stable <b>A4</b> Hedonism <input type="radio"/> Risk/Vertigo <input type="radio"/> Body <input type="radio"/> Falling	<b>SKATING</b> Horizontal Stable <b>E2</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Artefac <input type="radio"/> Turning/Rolling	<b>HIKING</b> Horizontal Stable <b>E4</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Body <input type="radio"/> Walking	<b>SKATEBOARD</b> Horizontal Stable <b>E7</b> Hedonism <input type="radio"/> Risk/Vertigo <input type="radio"/> Artefac <input type="radio"/> Jumping/Stunts	<b>TREE CLIMBING</b> Vertical Stable <b>E12</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Body <input type="radio"/> Climbing/Crawling	<b>DOWNHILL SKIING</b> Vertical Stable <b>E9</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Artefac <input type="radio"/> Snow sliding
			<b>HANG GLIDING</b> Flying Stable <b>A1</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Artefac <input type="radio"/> Gliding	<b>SKYSURF</b> Falling Stable <b>A3</b> Hedonism <input type="radio"/> Risk/Vertigo <input type="radio"/> Artefac <input type="radio"/> Falling	<b>MOUNTAIN BOARD</b> Horizontal Stable <b>E2</b> Hedonism <input type="radio"/> Risk/Vertigo <input type="radio"/> Artefac <input type="radio"/> Rolling	<b>SLACKLINE</b> Horizontal Stable <b>E3</b> Hedonism <input type="radio"/> Risk/Vertigo <input type="radio"/> Body <input type="radio"/> Balance	<b>SANDBOARD</b> Horizontal Stable <b>E5</b> Asceticism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Artefac <input type="radio"/> Jumping/Sliding	<b>POTHOLING</b> Vertical Unstable <b>E11</b> Asceticism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Body <input type="radio"/> Climbing/Crawling	<b>SNOWBOARD</b> Vertical Stable <b>E9</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Artefac <input type="radio"/> Snow sliding
			<b>GLIDING</b> Flying Stable <b>A2</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Artefac <input type="radio"/> Gliding	<b>FREEFALL</b> Falling Stable <b>A5</b> Hedonism <input type="radio"/> Risk/Vertigo <input type="radio"/> Body <input type="radio"/> Falling	<b>BIKE TRIAL</b> Horizontal Stable <b>E1</b> Asceticism <input type="radio"/> Risk/Vertigo <input type="radio"/> Artefac <input type="radio"/> Rolling	<b>MOUNTAIN CLIMBING</b> Horizontal Stable <b>E4</b> Asceticism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Body <input type="radio"/> Walking	<b>TRICKING</b> Horizontal Stable <b>E7</b> Asceticism <input type="radio"/> Risk/Vertigo <input type="radio"/> Body <input type="radio"/> Jumping/Stunts	<b>CLIMBING</b> Vertical Stable <b>E11</b> Asceticism <input type="radio"/> Risk/Vertigo <input type="radio"/> Body <input type="radio"/> Climbing/Crawling	<b>FREERIDE SKI</b> Vertical Unstable <b>E9</b> Asceticism <input type="radio"/> Risk/Vertigo <input type="radio"/> Artefac <input type="radio"/> Snow sliding
		EXTREME ADVENTURE	<b>WINGSUIT</b> Flying Stable <b>Ai1</b> Hedonism <input type="radio"/> Pleasure/Relax. <input type="radio"/> Artefac <input type="radio"/> Gliding	<b>B.A.S.E. JUMPING</b> Falling Stable <b>Ai5</b> Hedonism <input type="radio"/> Risk/Vertigo <input type="radio"/> Body <input type="radio"/> Falling	<b>STREET LUGE</b> Horizontal Stable <b>E2</b> Hedonism <input type="radio"/> Risk/Vertigo <input type="radio"/> Artefac <input type="radio"/> Rolling	<b>TRAIL RUNNING</b> Horizontal Stable <b>E4</b> Asceticism <input type="radio"/> Risk/Vertigo <input type="radio"/> Body <input type="radio"/> Running	<b>PARKOUR</b> Horizontal Stable <b>E6</b> Asceticism <input type="radio"/> Risk/Vertigo <input type="radio"/> Body <input type="radio"/> Jumping/Stunts	<b>MOUNTAINEE-RING</b> Vertical Unstable <b>T11</b> Asceticism <input type="radio"/> Risk/Vertigo <input type="radio"/> Body <input type="radio"/> Climbing/Crawling	<b>SNOWKITING / SPEEDFLYING</b> Vertical Unstable <b>E9</b> Asceticism <input type="radio"/> Risk/Vertigo <input type="radio"/> Artefac <input type="radio"/> Snow sliding
<b>TYPE OF POWER</b>			Wind	Gravity	Mechanical	Autogenerada	Self-generated	Self-generated	Self-generated
Low ecological impact			Medium ecological impact						

KEY:  Individual or psycho-praxical.  Group without collaboration or psycho-praxical in company.  Group with collaboration or socio-praxical.  Sportized.

Table 2. APAN practices identification table

# PHYSICAL ACTIVITIES IN NATURE

TYPES OF SLIDING						
RIDING/DODGING	IMMERSION / DIVING / SWIMMING	WIND SLIDING	MARITIME SLIDING	RIVER SLIDING	WATER/AIR ENGINE PROPULSION	WHEELED ENGINE PROPULSION
8	9	10	11	12	13	14
	<b>SNORKEL</b> Hrzt.-Sea/Lake Stable <b>W1</b> Hedonism Pleasure/Relax. Body Immersion	<b>WINDSURF</b> Hrzt.-Sea/Lake Stable/Unstable <b>Ag3</b> Asceticism Pleasure/Relax. Artefac Wind sliding	<b>SKIMBOARDING</b> Hrzt.-Sea/Lake Stable <b>Ag6</b> Hedonism Pleasure/Relax. Artefac Maritime sliding	<b>CANOE</b> Vertical-River Unstable <b>W7</b> Hedonism Pleasure/Relax. Artefac River sliding		<b>QUADS</b> Horizontal Stable <b>F3</b> Hedonism Pleasure/Relax. Engine Wheeled Engine prop.
<b>HORSING</b> Horizontal Stable <b>E8</b> Hedonism Pleasure/Relax. Animal Riding	<b>OPEN WATER CROSSING</b> Hrzt.-Sea/Lake Stable <b>W1</b> Asceticism Pleasure/Relax. Body Swimming	<b>SAILING</b> Hrzt.-Sea/Lake Sta./Unstable <b>W3</b> Asceticism Pleasure/Relax. Artefac Wind sliding	<b>PADDLE SURF</b> Hrzt.-Sea/Lake Stable <b>W6</b> Hedonism Pleasure/Relax. Artefac Maritime sliding	<b>KAYAK</b> Vertical-Río Unstable <b>W7</b> Hedonism Pleasure/Relax. Artefac River sliding	<b>SNOWMOBILE</b> Horizontal Stable <b>F1</b> Hedonism Pleasure/Relax. Engine Snowmob. engine prop.	<b>BUGGY</b> Horizontal Stable <b>F3</b> Hedonism Pleasure/Relax. Engine Wheeled Engine prop.
<b>CAMEL CROSSING</b> Horizontal Stable <b>E8</b> Hedonism Pleasure/Relax. Animal Riding	<b>UNDERWATER FISHING</b> Hrzt.-Sea/Lake Stable <b>W1</b> Hedonism Pleasure/Relax. Body Immersion	<b>KITESURF</b> Hrzt.-Sea/Lake Sta./Unstable <b>W3</b> Asceticism Risk/Vertigo Artefac Wind sliding	<b>BODYBOARD</b> Hrzt.-Sea/Lake Unstable <b>W5</b> Hedonism Pleasure/Relax. Artefac Maritime sliding	<b>RAFTING</b> Vertical-Río Unstable <b>W7</b> Hedonism Pleasure/Relax. Artefac River sliding	<b>PWC</b> Horizontal Stable <b>F1</b> Hedonism Pleasure/Relax. Engine Water engine prop.	<b>TRIAL</b> Horizontal Stable <b>F3</b> Asceticism Risk/Vertigo Engine Wheeled Engine prop.
<b>BULLFIGHTING</b> Horizontal Stable <b>E8</b> Hedonism Risk/Vertigo Animal Dodging	<b>CLIFF JUMPING</b> Hrzt.-Sea/Lake Stable <b>W2</b> Hedonism Risk/Vertigo Body Jumping	<b>KITEFOIL</b> Hrzt.-Sea/Lake Stable <b>W4</b> Asceticism Risk/Vertigo Artefac Wind sliding	<b>WATERSKIING</b> H-Sea/Lake Unstable <b>W6</b> Hedonism Pleasure/Relax. Artefac Maritime sliding	<b>CANYONEERING</b> Vertical-Río Unstable <b>W8</b> Hedonism Pleasure/Relax. Body River sliding	<b>FLYBOARD</b> Horizontal Stable <b>F1</b> Hedonism Risk/Vertigo Engine Water engine prop.	<b>4X4</b> Horizontal Stable <b>F4</b> Hedonism Pleasure/Relax. Engine Wheeled Engine prop.
<b>RODEOS</b> Horizontal Unstable <b>E8</b> Asceticism Risk/Vertigo Animal Riding	<b>SCUBA DIVING</b> Hrzt.-Sea/Lake Stable <b>W1</b> Hedonism Pleasure/Relax. Body Immersion	<b>ICE YACHTING</b> Hrzt.-Sea/Lake Stable <b>W4</b> Asceticism Risk/Vertigo Artefac Wind sliding	<b>SURF</b> Hrzt.-Sea/Lake Unstable <b>W6</b> Asceticism Risk/Vertigo Artefac Maritime sliding	<b>RIVERBOARD-DING</b> Vertical-Río Unstable <b>W7</b> Hedonism Pleasure/Relax. Artefac River sliding	<b>ULTRALIGHT AVIATION</b> Horizontal Stable <b>F2</b> Hedonism Pleasure/Relax. Engine Air engine prop.	<b>MOTOCROSS/ ENDURO</b> Horizontal Stable <b>F3</b> Hedonism Risk/Vertigo Engine Wheeled Engine prop.
<b>SNOW SLEDGES</b> Horizontal Stable <b>E8</b> Hedonism Pleasure/Relax. Animal Riding	<b>CAVE DIVING</b> Hrzt.-Sea/Lake Stable <b>W1</b> Asceticism Risk/Vertigo Body Immersion	<b>CRUISE/SAIL-BOAT CROSSING</b> Hrzt.-Sea/Lake Sta./Unstable <b>W4</b> Asceticism Risk/Vertigo Artefac Wind sliding	<b>WAKEBOARD</b> Hrzt.-Sea/Lake Unstable <b>W6</b> Hedonism Risk/Vertigo Artefac Maritime sliding	<b>EXTREME CANOEING</b> Vertical-Río Unstable <b>W7</b> Asceticism Risk/Vertigo Artefac River sliding	<b>JETMAN</b> Horizontal Stable <b>F2</b> Hedonism Risk/Vertigo Engine Air engine prop.	<b>FMX</b> Horizontal Stable <b>F3</b> Asceticism Risk/Vertigo Engine Wheeled Engine prop.
<b>Animal</b>	<b>Underwater</b>	<b>Wind</b>	<b>Marine</b>	<b>River</b>	<b>Engine</b>	<b>Engine</b>
<b>Medium ecological impact</b>					<b>High ecological impact</b>	

€ High cost.

If the activity is consolidated as a sport with regulated competitions, with a federation that regulates and covers them, with prestige recognised even by large organisations (such as the IOC), then we add the Olympic icon to them to highlight their sporting side. If the icon is not there that is because we believe that the nature of the practices shuns the homogenisation of sport and is based on the pursuit of freedom and flexibility in the spirit of APAN according to the social models of their time. We also add another icon if the activity has a *high financial cost* for materials, devices, costs of doing the practice, and hiring or purchasing the equipment the user needs. Finally, in each of the 81 squares we have included the code of the activity group to which each activity belongs in a small box to connect the identification table with the taxonomic table; we have included at least one representative of each of the 5 groups of air (A), the 12 groups of earth (E), the 8 groups of water (W) and the four groups of fire (F) coming to 29 activity groups in total.

Due to environmental concerns about the negative impact that these practices may have on the environment, we have also produced a table of the ecological impact of APAN in which we have classified the practices in terms of their environmental impact. There are four impact levels in this classification: level 'A' (least environmental impact) and 'D' (greatest environmental impact), with two intermediate 'B' and 'C' levels.

The main findings obtained from this table are the preponderance of practices in the 'Fire' medium as activities that generate high environmental impact (level D) owing to their noise and visual pollution, potential danger, footprint and environmental pollution because of the gases they emit. Canyoneering and mountaineering, water and earth practices respectively, are also in this pollutant category, the former due to its fragile ecosystem and the massive and continuous presence of users who destroy the delicate habitat of the river canyons, and the latter due to the huge equipment needed to climb high peaks in fragile ecosystems which is then left behind as waste.<sup>26</sup> Air practices in general are less polluting and have less impact while the other types are classified in one or

other group depending on the materials used, practice in more or less fragile ecosystems, large numbers of people doing them, their footprint during practice and time of permanence.

To cover the sportisation of each group of established practices and their relative positions, we have provided a coordinate axis in which this process of the influence of sport is linked to the 'hedonism/asceticism' parameter.

This table shows that the groups of APAN practices most influenced by the sports system, or sportised, are in the 'asceticism' quadrant and conversely most practices not sportised and therefore with little influence of the sports system are primarily in the upper right 'hedonism' quadrant. These locations show how APAN are in the hedonistic-ecological body model and by contrast practices that are most sportised have an ascetic component of sacrifice and effort and are therefore closer to the ascetic sport model. In our view sportisation of APAN practices is a distortion of them and therefore a loss of identity since by their nature, purpose, environment and culture they belong to an alternative system that emerges precisely in reaction to sport and evolves outside it.

## Final thoughts

Thirty years after the emergence of these practices in Spain, APAN have gone from being a postmodernity fashion, a reaction against sport, to become established as an alternative model fully settled in a new time we call transmodernity. These practices, reaffirming the appropriateness of their name and the relevance of the acronym APAN, have evolved over this period without losing their nature, foundations or purpose along the way. They have gained followers and practitioners, have become fixtures in our society through new media and have diversified practices and their motor behaviour based on the expectations and challenges of their practitioners. The technological contribution has been instrumental in this effort since it has brought with it an incredible variability of applications to existing practices by providing the various activities with increased safety, manoeuvrability and daring to achieve greater challenges. The flexibility

<sup>26</sup> Mountaineers have to leave a lot of waste on the mountain to save weight or because they cannot carry it since the success of reaching the summit or the climber's safety comes first.

<b>ECOLOGICAL IMPACT OF ADVENTURE PHYSICAL ACTIVITIES IN NATURE</b>				
	<b>AIR</b>	<b>EARTH</b>	<b>WATER</b>	<b>FIRE</b>
least environmental impact	PARAGLIDING / HANG GLIDING / ZIP-LINE / BUNGEE JUMPING / BASE JUMPING / WINGSUIT	BICYCLE TOURING / SKATING / FREESKATE / STREETLUGE / LONGBOARD / SLACKLINE / HIGHLINE / ABSEIL / ZORBING / PARKOUR / TRICKING / SKATEBOARD / STREETSTUNTS / HORSING / CAMELS / BULLFIGHTING / RODEOS / TRINEOS / RAQUETAS / SANDBOARD	CLIFF JUMPING / WINDSURF / KITESURF / KITEFOIL / PADDLE SURF / SURF / BODYBOARD / SKIMBOARD / FLOWBOARD	
<b>A</b>				
	HOT AIR BALLOON / GLIDING	MOUNTAINBOARD / TREE CLIMBING / HIKING / MOUNTAIN CLIMBING / ORIENTEERING / TRAIL RUNNING / NORDIC SKIING / FREERIDE SKI / TELEMAR	SNORKEL / FREE DIVING / SAILING / KAYAK / RAFTING / RIVERBOARDING / CANOE / KAYAKING / UNDERWATER FISHING / CRUISE-SAILBOAT / ICE YACHTING / SCUBA DIVING / CAVE DIVING	
<b>B</b>				
	SKYSURF / FREEFALL / PARACHUTING / PARASAILING	BIKETRIAL / MOUNTAINBIKE / DOWNHILL SKIING / SNOWBOARD / SNOWKITING / SPEEDFLYING / COASTEERING / VIA FERRATA / TREE CLIMBING / CLIMBING / ICE CLIMBING / POTHOLING	WATERSKIING / WAKEBOARD / BAREFOOT WATER SKI	FLYBOARD / MOTORISED PARAGLIDING / ULTRALIGHT AVIATION
<b>C</b>				
greatest environmental impact		MOUNTAINEERING	CANYONEERING	SNOWMOBILE / PWC / MOTORBOAT / QUADS / BUGGIES / MOTOCROSS / ENDURO / FMX / KARTS / 4X4 / RALLIES / JETMAN
<b>D</b>				

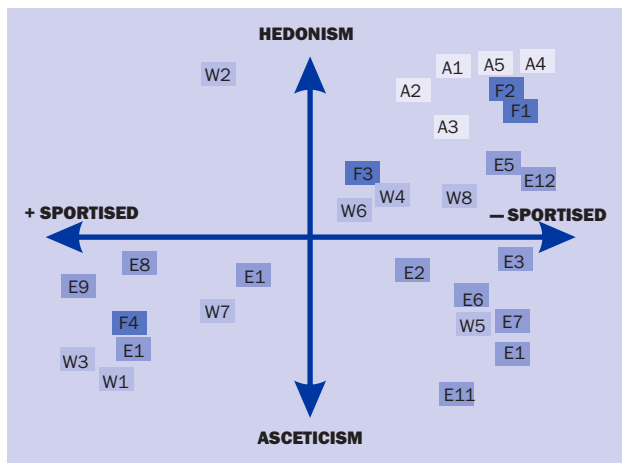
**Table 3.** Ecological impact of APAN

of this universe of practices has enabled them to grow supported by technology but also by the social factor as they have been taken up by a crowd of people eager for new experiences and looking to give meaning to their routine lives. The 109 types identified as a whole located in different participation areas and in demand in increasingly diverse population sectors are a clear demonstration of this spectacular growth.

APAN have become an antidote to the certainty of everyday life and today offer people numerous experiences grounded in uncertainty and controlled risk in contact with nature that promise a different adventure and a rush of self-esteem. Symbolic adventure is their essential foundation that dovetails perfectly with a social environment which seeks to go to the limit, to go beyond, a unique experience. Social groups have formed around this world of exciting activities with similar interests and tastes, urban tribes and a thriving network of companies that have weathered the global

economic crisis and deliver the activities with imagination and an innovative spirit. Their global expansion has been emphatic since they are to be found on every continent and every region competes with the others to offer more adventure and fun in unique places. There are TV channels that promote these practices, show the latest developments and promote major extreme adventure events that feed back into this area. Social media, internet and ICT help to instantly publicise and spread the spectacular nature, benignity and appropriateness of these activities across the globe.

The trends that can be glimpsed are an increase in new activities through new technological applications which enable new practice options that provide new experiences and adventures. APAN have become eminently innovative practices that promote increasingly personalised practices that are tailored for each population sector wishing to do them. Increasingly discerning and personalised demand will have to be met



**Figure 1.** Sportisation process of different groups of APAN practices

by more globalised, specialised and competitive supply that runs activities in every corner of the planet. Extreme adventure helps with the popularity, dissemination and desire to do these activities as we all have a Superman inside. APAN will conclusively contribute to the final colonisation of the planet Earth.

**Conflict of interests**

The authors declares that there is no conflict of interests.

**References**

Büchell, H. (2014 July 18<sup>th</sup>). El lado oscuro de Red Bull [In YouTube]. Retrieved from <https://www.youtube.com/watch?v=b-5n1E0CSb4k>

Chul-Han, B. (2012). *La sociedad del cansancio*. Barcelona: Herder.

Feixa, C. (1995). L'aventura imaginària. Una visió antropològica de les activitats físiques d'aventura a la natura. *Apunts. Educació Física i Esports* (41), 36-43.

García Ferrando, M. (2006). *Posmodernidad y Deporte: Entre la individualización y la masificación (Encuesta sobre los hábitos deportivos de los españoles 2005)*. Madrid: Consejo Superior de Deportes/ Centro de Investigaciones Sociológicas.

Hart-Davis, A. (Edit.) (2013). *Ciencia. La guía visual definitiva*. Madrid: Akal.

Olivera, J. (1995). Les activitats físiques d'aventura a la natura: anàlisi socio-cultural. *Apunts. Educació Física i Esports* (41), 5-9.

Olivera, J., & Olivera, A. (1995a). La crisi de la modernitat i l'adveniment de la postmodernitat: l'esport i les pràctiques físiques alternatives en el temps d'oci actiu. *Apunts. Educació Física i Esports* (41), 10-29.

Olivera, A., & Olivera, J. (1995b). Proposta d'una classificació taxonòmica de les activitats físiques d'aventura a la natura. Marc conceptual i anàlisi dels criteris escollits. *Apunts. Educació Física i Esports* (41), 108-123.

Quester, P., Beverland, M., & Farrelly, F. (2006). Brand-personal values fit and brand meanings: Exploring the role individual values play in ongoing brand loyalty in extreme sports subcultures. *Advances in Consumer Research* (33), 21.

Rodríguez-Magda, R.M. (2007). Transmodernidad: La globalización como totalidad transmoderna. *Revista Observaciones Filosóficas* (4), 34.

Tomlinson, A., Ravenscroft, N., Wheaton, B., & Gilchrist, P. (2005). Lifestyle sports and national sport policy: An agenda for research [Report (for external body)]. University of Brighton.

Zeba Produccions (2014 December 21<sup>th</sup>). En memòria de Pau Escalé. Esport 3. Reflexió sobre la vida [In YouTube]. Retrieved from <https://www.youtube.com/watch?v=1aAL4PUFLcA>