



trébol

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Solvency II and its application outside Europe.

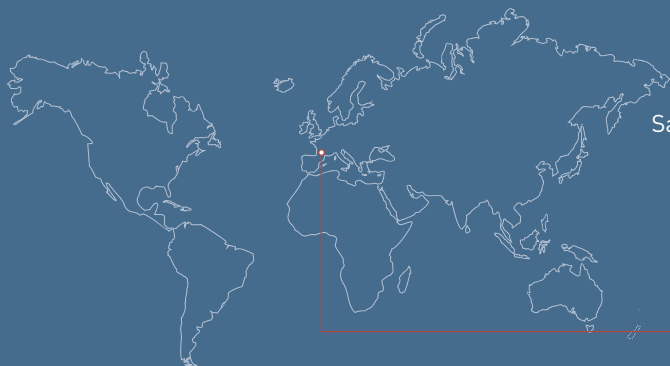
An Insurance Dictionary in the 21st century.

Commander Aguilar: How to navigate on ice aboard the BIO Hespérides.

David Trueba: The intellectual's instinct when facing risk.

57





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summary

03

editorial

04

Solvency II: application in countries which do not belong to the European Economic Area (EEA)

Pedro López
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10

A dynamic and interactive insurance dictionary

M^a José Albert
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16

interview:

Commander Juan Antonio Aguilar
Frigate Captain BIO Hespérides

24

interview:

David Trueba
Journalist, writer, actor, scriptwriter, and film and television director

31

agenda

editorial

We continue our series of articles analyzing the application and implications of Solvency II, launched in issue 56 of Trébol with a commentary by Pedro López Solanes, General Manager of MAPFRE International, on the application of the new regulations to insurance groups with companies in countries that do not belong to the European Economic Area (EEA). It would appear that Solvency II takes account of all possible cases, being the availability of economic information for the group, and the provision of suitable IT tools to produce accurate and homogeneous calculations the indispensable keys to compliance with the new regulations for the European insurance sector. Nevertheless, the various markets are governed by very different parameters such as criteria for valuing real estate and interest rate curves; this means that the coming months will be critical in terms of carrying out the calculation procedures for Solvency II.

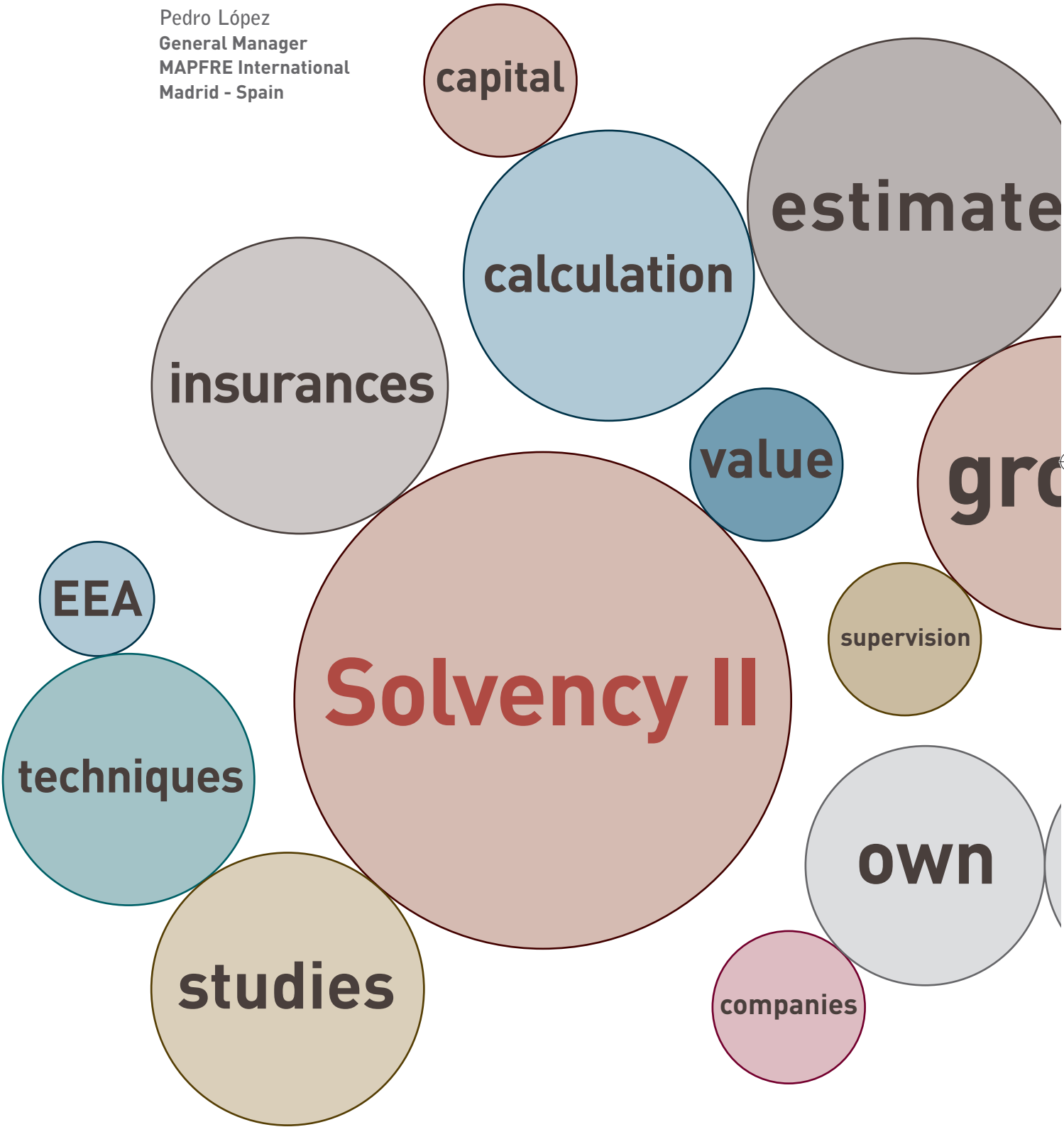
A responsible society safeguards its cultural heritage and endeavours to hand it down to future generations. In today's world, companies also take on this task, which used to be accomplished by copyist monks in their monasteries. Insurance is a science that spans many areas of learning, and it needs to establish new terms, to record those which have always existed and to translate them into other languages so as to disseminate their meaning. María José Albert and Ana Sojo of Instituto de Ciencias del Seguro of MAPFRE Foundation take us on a journey through the history of the MAPFRE Insurance Dictionary, which is now managed with the help of 21st-century technology, the Internet and all its associated tools.

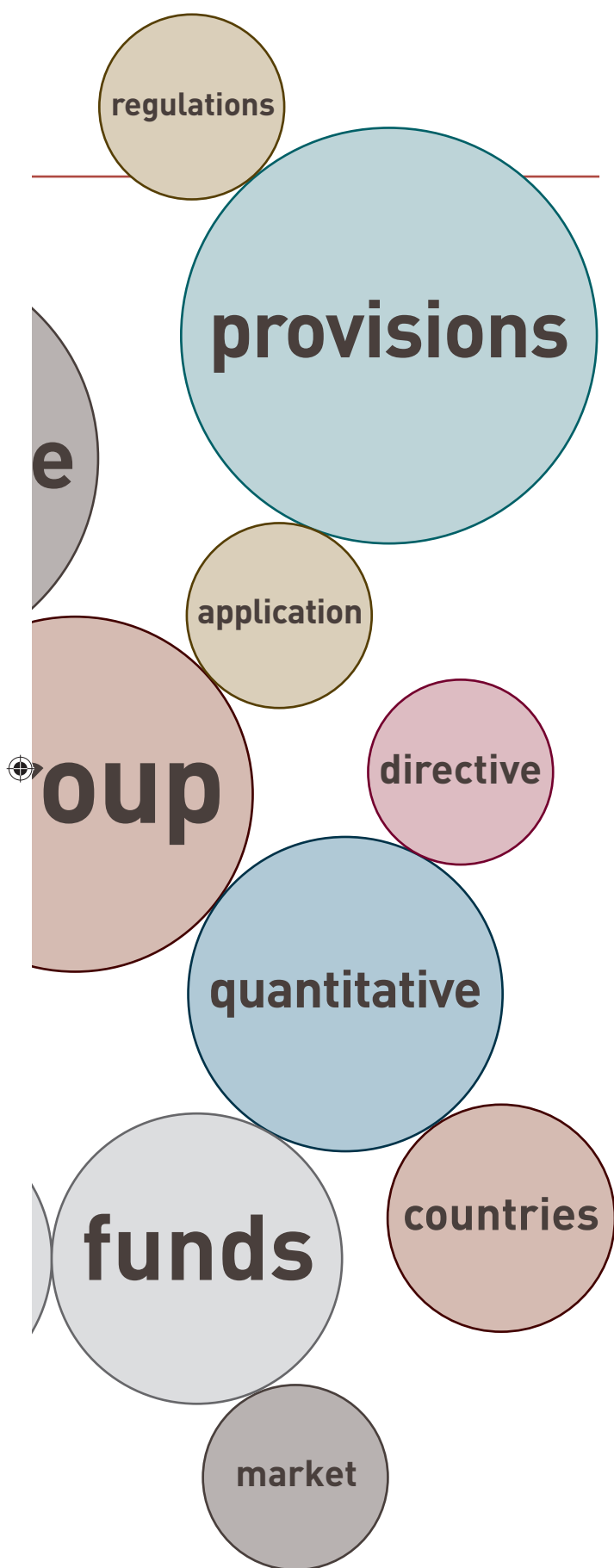
The name of this vessel is inseparably linked with oceanographic research in Spain: the *Hespérides*. For the last 20 years, it has set sail for the southern summer each December, carrying international groups of researchers and highly sophisticated equipment to accomplish its scientific missions. In our interview with Commander Aguilar, we embark on a voyage of discovery that includes such varied aspects as managing the risks of sailing in waters where there is ice, the logistics of the Spanish Navy as handled by a professional crew, and the management of the waste generated during voyages; we also learn how the Antarctic Treaty protects the ice continent from national interests. This is a comprehensive lesson in risk management in the most hostile environment imaginable, which nevertheless holds many more scientific discoveries in store.

David Trueba comes from a family of movie makers, but one with a keen awareness of traditional social values. In this interview -which he agreed to grant us as soon as we made our request- this modern Leonardo da Vinci of the intellectual world explains how he started out on the basis of his journalistic training to explore the worlds of the novel, cinema and many aspects of television. He does not fit into any single profession; he is not afraid to carry on experimenting; and in the meantime, he continues to deliver entertainment, laughter and food for thought to all those who read and see his work.

**Solvency II: aplication in countries
which do not belong to the European
Economic Area EEA**

Pedro López
General Manager
MAPFRE International
Madrid - Spain





A complex business

Article 2 of Directive 2009/138/EC of the European Parliament and of the Council dated 25 November 2009 “on life insurance, and on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II)” stipulates that the Directive’s scope of application comprises life and non-life insurance companies established on the territory of a Member State.

Nevertheless, Title III of the Directive regulates its application to companies which form part of a group, even though such companies may be established in countries that do not belong to the European Economic Area (EEA). For this reason, application of the new Solvency II regulations is a particularly complex matter (and it is no coincidence that five Quantitative Impact Studies (QIS) have been undertaken in the last five years); it becomes even more complicated when groups are involved. This is why Title III of the Directive devotes more than 90 articles to this subject.

The role of Group Supervisor

The first chapter of title III (Art. 212) already defines the role of “Group Supervisor” as the person responsible for coordinating and supervising the group of companies, selected from the supervisory authorities of the Member States concerned.

Art. 213 stipulates that insurance companies (regardless of where they are established), whose parent company is an insurance portfolio holding company with its head office in the EEA, are subject to group supervision. This means that if the parent company is domiciled in Spain but has branches in (for example) the Philippines or Brazil, group supervision will apply to both branches and they should comply with the Solvency II regulations.

It is clear that Art. 214 allows the Group Supervisor to exclude a specified company from supervision, but this is only permitted in three cases which are very specific and perfectly understandable:

- a. When the company is established in a country where there are legal impediments to obtaining information.

Application of the new Solvency II regulations is a particularly complex matter, and it becomes even more complicated when groups are involved





The “Group Supervisor” is the person responsible for coordinating and supervising the group of companies, selected from the supervisory authorities of the Member States concerned

- b. When the company represents an insignificant interest as compared to the rest of the companies in the group.
- c. When the inclusion of the company proves to be unsuitable or would lead to error in relation to the supervisory objectives.

Solvency II is applicable in all other cases.

Having established that the scope of application is global, it is then necessary to determine its implications as regards the solvency calculation at group level.

For this purpose, Art. 218, clause 3 of the Directive states that:

*“The Member States shall require the participating insurance or reinsurance companies to ensure that **eligible own funds are available** in the group which are **always** at least equal to the group Solvency Capital Requirement”.*

This calculation must be performed at least once per year, but the Directive specifies that if the company’s risk profile alters signifi-

cantly during the accounting year from the profile at the time of the last calculation, it must undertake a new calculation **without delay**, to be sent to the Group Supervisor.

Solvency calculation at group level

The next question raised by the Directive concerns the method of calculating the solvency capital, and on this matter and as a summary, the Directive states the following:

The solvency capital is calculated on the basis of the consolidated accounts and this capital may be calculated by two methods:

- a. Standard formula.
- b. Group internal models.

In both cases:

- The valuation methods for the consolidated accounts, which form the basis for calculating the solvency capital, must be identical in all the countries. The valuation of assets and liabilities must be undertaken



at market prices (Art. 75) and in addition, the technical provisions must be valued as the “sum of a best estimate” (*Best Estimate Liabilities*, BEL) plus a risk margin.

- Off-balance-sheet adjustments must be implemented so that assets and liabilities are valued at market prices and in addition, it is necessary to determine whether the technical provisions are the “best estimate”; if not, they must be recalculated, and if they are, the schedule of payments must be obtained and they must be discounted at present value, using a free risk rate.

As may be imagined, these two points have very major implications for large insurance groups, although the International Financial Reporting Standards (IFRS) are already applied in a general manner in many countries, and these standards allow different application options on many points.

For example, real estate may be valued at market price or cost price less depreciations, which would involve the off-balance-sheet adjustments practiced in those countries

(such as Spain) where real estate is mostly valued at cost price.

However, the greatest difficulty arises when it comes to valuing the technical provisions, where the valuation approach changes radically; in the past, the technical provisions were valued on the basis of a “prudential criterion”, whereas this criterion is now relegated to second place.

According to the Solvency II calculation regulations (Art. 77), it is the best possible estimate which must be obtained (*Best Estimate Liabilities*, BEL). The aim here is to calculate a theoretical market value at which the technical provisions can be traded.

“...the best estimate shall correspond to the probability-weighted average of future cash-flows, taking account of the time value of money (expected present value of future cash-flows), by using the relevant risk-free interest rate term structure” (Art. 77. 2).

One direct consequence of this new approach is that the provision for unearned premiums ceases to be a premium accrual account and is converted into an estimate of future liabilities relating to policies and contracts in force on the calculation date (future premiums less claims and liquidation expenses, administration and acquisition costs, all calculated on the basis of our best estimate).

The technical specifications drawn up for completing the Quantitative Impact Studies (QIS) stipulate in great detail when the technical provisions may be considered as BEL; prior studies are necessary in all the companies and all the countries to determine whether the said conditions are met, and the relevant studies must be certified by the technical/actuarial departments of the companies in question.

Finally, it is no less important to note that technical provisions must be calculated at their present value; this implies that they must be discounted with the use of an interest rate curve. The European Commission definitely wants EIOPA (the European Insurance and Occupational Pensions Authority) to provide rate curves for use with the main currencies

In Solvency I, technical provisions were valued on the basis of a prudential criterion, whereas this criterion is now relegated to second place

Interest rate curves will be difficult to obtain in countries where financial bond markets and interest rate swap transactions are not sufficiently developed

(including EUR, USD and the various currencies of European countries which do not use the euro), but the Authority is unlikely to provide interest rate curves for all currencies. This will present difficulties when it comes to producing these curves in order to conform to the criteria stated in the last QIS5. These criteria are so rigorous and complex that -to put it simply- it is virtually impossible to comply with them in countries where financial bond markets and interest rate swap transactions are not sufficiently developed.

Given that the regulator is aware of the major practical consequences of the aspects described above, we understand that the Directive (Art. 227) allows the solvency capital of the branch established outside the EEA to be the solvency capital calculated according to local criteria. For this purpose, the third country must have an equivalent solvency regime; the equivalence of this regime must be assessed by the Group Supervisor for definitive approval, in consultation with all the supervisory authorities and the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS). This point may make it very much easier to apply Solvency II in groups with branches in countries with advanced solvency legislation, since it would merely be necessary to aggregate the solvency capital calculated on the basis of the local regulations, with no need to carry out the complex process of off-balance-sheet adjustments and recalculation of technical provisions as described above.

Quantitative Impact Studies (QIS)

As already mentioned, the calculation of solvency capital may be carried out according to standard or internal models. For the calculation of a standard formula at European level, a series of studies known as “*Quantitative Impact Studies*” (QIS) has been developed. Five such studies have been undertaken to date.

These studies cover:

- Calculation of the economic capital based on all the company’s risks (underwriting,



CAT (catastrophe), operational, financial, counterpart, etc.)

- Comparison with adjusted own funds available for the company.

Since this article does not aim to explain these questionnaires, we shall not embark on such a description except as regards groups and the most important aspects relating to them.

The instructions for completing the QISs are detailed in what is known as “technical specifications”. The technical specifications for QIS5 include a section (6) concerning the completion of QIS5 for groups. The point dealing with the group’s own funds and their availability is particularly important.



This means that it is not sufficient to determine the solvency capital for the group; it is also necessary to decide whether the amounts of solvency capital calculated in each of the countries are transferrable. A simple example will clarify this concept:

Country	Solvency capital	Available capital	Excess/ shortfall
Spain	1,000	1,100	100
USA	1,500	1,450	-50
Total group	2,500	2,550	50

As can be seen, the group will not have any solvency problems, but if the excess generated in Spain is a consequence of the statutory reserve, it can only be used to compensate losses; therefore, it cannot be used theoretically to compensate for a putative solvency capital shortfall in the USA.

The criteria which groups must follow in order to determine the availability of own funds are as follows:

- ▶ National regulations applicable to specified portions of own funds (statutory reserves) stipulate, as a binding requirement, that they are used solely to absorb certain losses.
- ▶ Prohibition on transfer of assets in which separate components of own funds may be represented.
- ▶ There is slowness in the administrative procedures to authorize the availability of own funds. Specifically, it is stipulated that those own funds whose availability is subject to authorization which takes more than nine months to obtain shall not be considered as transferrable and (therefore) available for the calculation of the group's capital.

Conclusion

The application of Solvency II in large insurance groups will have very major implications which cannot be resolved unless the mechanisms and tools to allow calculation of the solvency capital for the whole group are placed sufficiently ahead of time. The availability of centralized information will save a great deal of effort and will provide a better guarantee of accuracy and homogeneity for the calculations. Entities which do not belong to the European Economic Area will have to comply with the requirements of Solvency II, which in turn means that these companies will need to rely on tools and teams that can ensure the availability of all this information.

<https://eiopa.europa.eu/>

A dynamic and interactive insurance dictionary

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Ana M^a Sojo
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risk [risk] **n.** 1. [C]
possibility or chance
suffering loss or inj
~s; take the ~ of
no (not much) ~
if you wrap up wel
the ~ of being
enemy. He was
none of the ~ of
~ everything
~ ~ ~



All human activities make use of their own vernacular, containing a specific or shared vocabulary of words acquired from a language during the practice of the activity in question.

As one area of human and economic activity, insurance also has its own code of communication which has evolved since time immemorial, as ancient as the concept of human solidarity.

If the quantity, quality and precision of these linguistic expressions reflect the level of development attained in a specific area, then it may be said that insurance is a highly sophisticated sector of economic activity where terms, expressions and concepts originating from various fields coexist; it may therefore be classified as a mature sector within the financial world in which it operates.

The MAPFRE Dictionary of Insurance was developed under the auspices of Instituto de Ciencias del Seguro of MAPFRE FOUNDATION, and it meets one of the Institute's basic objectives: to promote and disseminate the culture of insurance at all levels.

What is a dictionary?

The word "dictionary" is derived from the Latin word *diccionarius* which in turn originates from *dictus*, meaning "the act of saying". The predecessors of dictionaries were glossaries, which collected together the words or terms in a particular semantic field.

According to the definition assigned by the DRAE¹, a **dictionary** is "a book which collects and explains words in one or more languages, relating to a specified science or subject, in an ordered manner".

Predecessors

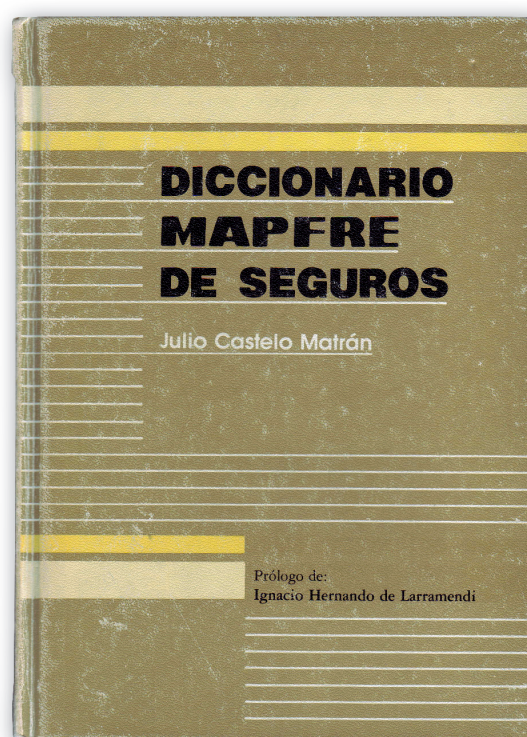
Published in 1972, the Basic MAPFRE *Dictionary of Insurance* quickly became a classic

in the insurance world, especially in certain Latin American countries. Its authors, Julio Castelo Matrán and José María Pérez Escacho, were the real pioneers of this enormous task of systematizing and disseminating knowledge.

The original *Dictionary* was followed by further editions (in 1988, 1990 and 1992) with very significant growth in the number of terms (which increased from 1,500 to 4,000) and with the addition of more concepts and expressions; the incorporation of a trilingual glossary also enhanced the educational value and international nature of the work.

The most recent version, published in 2008 with 5,400 expressions, improves substantially on the preceding editions. Moreover, large numbers of terms have been revised, either because they had become outmoded or because it was possible to improve their definitions. Certain entries were also discarded because they had fallen out of use or were becoming obsolete, especially in relation to technology. At the same time, the new insurance landscape and the process of economic

Terms, expressions and concepts originating from various fields coexist in insurance, so it may be classified as a mature sector within the financial world



¹ Dictionary of the Royal Spanish Academy (www.rae.es)



globalization have resulted in the introduction of numerous concepts which did not exist when the previous versions were compiled.

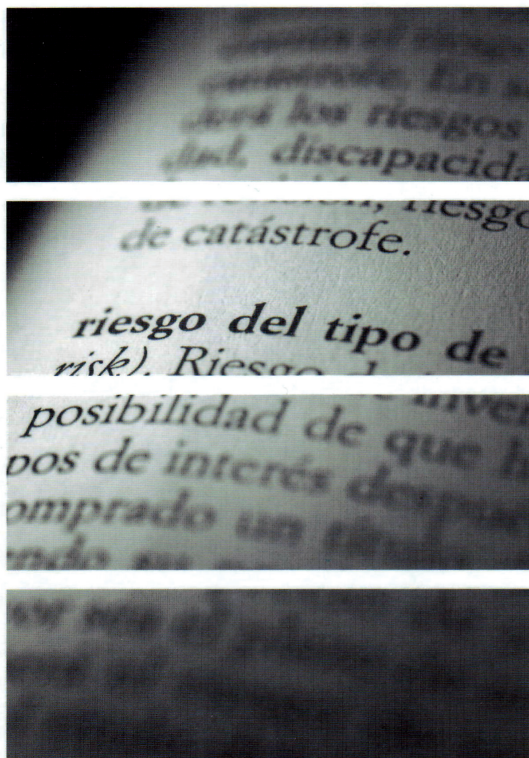
As well as words derived from insurance practice in its strict sense, the Dictionary includes terms originating from the Insurance Sciences, as they are known: **law**, **actuarial science** and **finance**. Law and its application to the insurance context is represented by the terms relating to civil, commercial, procedural, labour and administrative law that are necessary in order to understand insurance, pensions and risk management. There are numerous terms relating to actuarial science

DICCIONARIO MAPFRE DE SEGUROS

Julio Castelo Matrán y Antonio Guardiola Lozano

Edición ampliada por María Luisa Castelo Marín

Tutelada por Julio Torralba Martínez





and finance, which enable clarification of questions concerning the technical aspects of insurance as such, and the treatment of risks. The Dictionary also includes entries related to **management**, covering all aspects of commerce, accounting, auditing and technology.

Online dictionary

The latest (2008) edition incorporates the legacy of the past while adopting an innovative approach that is appropriate to the 21st century. This is a dynamic work that is continuously updated, given that it has a corresponding version on the Internet, designed as a forum for collaboration and feedback where users and researchers can contribute terms and different meanings for existing terms or even suggestions of any sort regarding deletions or emendations to the Dictionary's content.

www.diccionariomapfredeseguros.com

Online publication of the Dictionary goes beyond the mere posting of content: it also allows web users to ask questions or seek advice on its content and to obtain useful information, so that problematic or confusing



Online publication of the Dictionary allows web users to ask questions or seek advice on its content so that problematic or confusing terms can be identified and certain terms that were not initially recorded can be added

terms can be identified and alternative usages or terms that were not initially recorded can be added.

The online edition is destined to become the living and evolving adaptation of the Dictionary, freed from the restrictions of the printed version; its content can be continuously updated, expanded and amplified. It was consulted more than 700,000 times in 2010.

The dictionary uses the GSA (Google Search Appliance) technology to perform searches. It is possible to search for a word or a term, or to enter free text in the search box, which also allows navigation in alphabetic order. All the terms have a corresponding translation into English, and they can be located in either language.

The Dictionary can easily and quickly be integrated into other websites, and a direct link to the search engine can be included via banner.

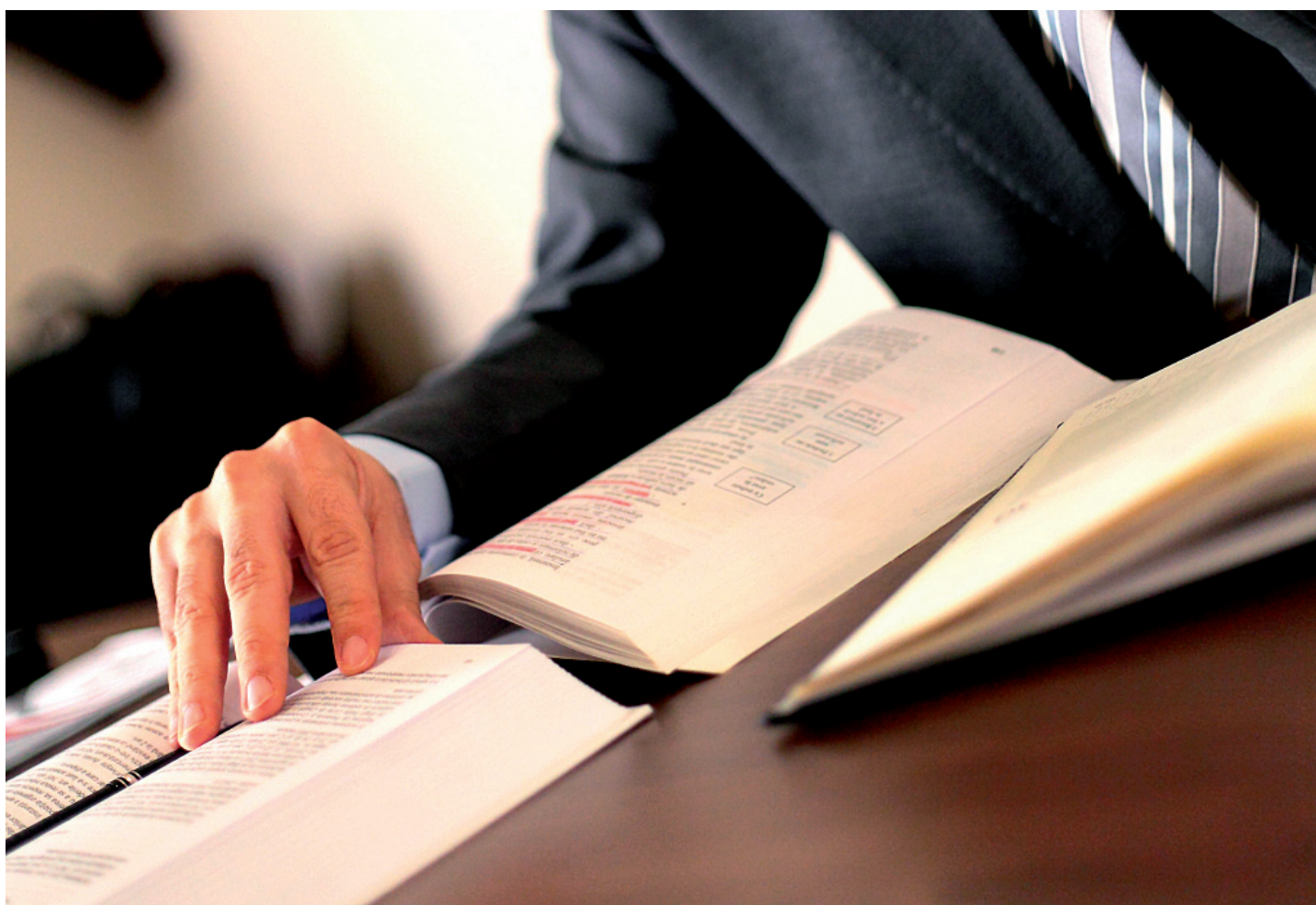
The future

The welcome accorded to the Dictionary in various Latin American countries will result in a new edition to cover special terminological features of the different Spanish-speaking countries on that continent, both as regards the legal framework of the various jurisdictions and their main insurance usages, customs and practices.

Likewise, the forthcoming Portuguese version of the Dictionary will reflect the special characteristics of the insurance markets in Brazil and Portugal.

Concluding thoughts

Andreu and Sieber (2000) claim that knowledge is personal, in that it originates and resides in the individuals who assimilate it as a result of their own experience, i.e. their own activities



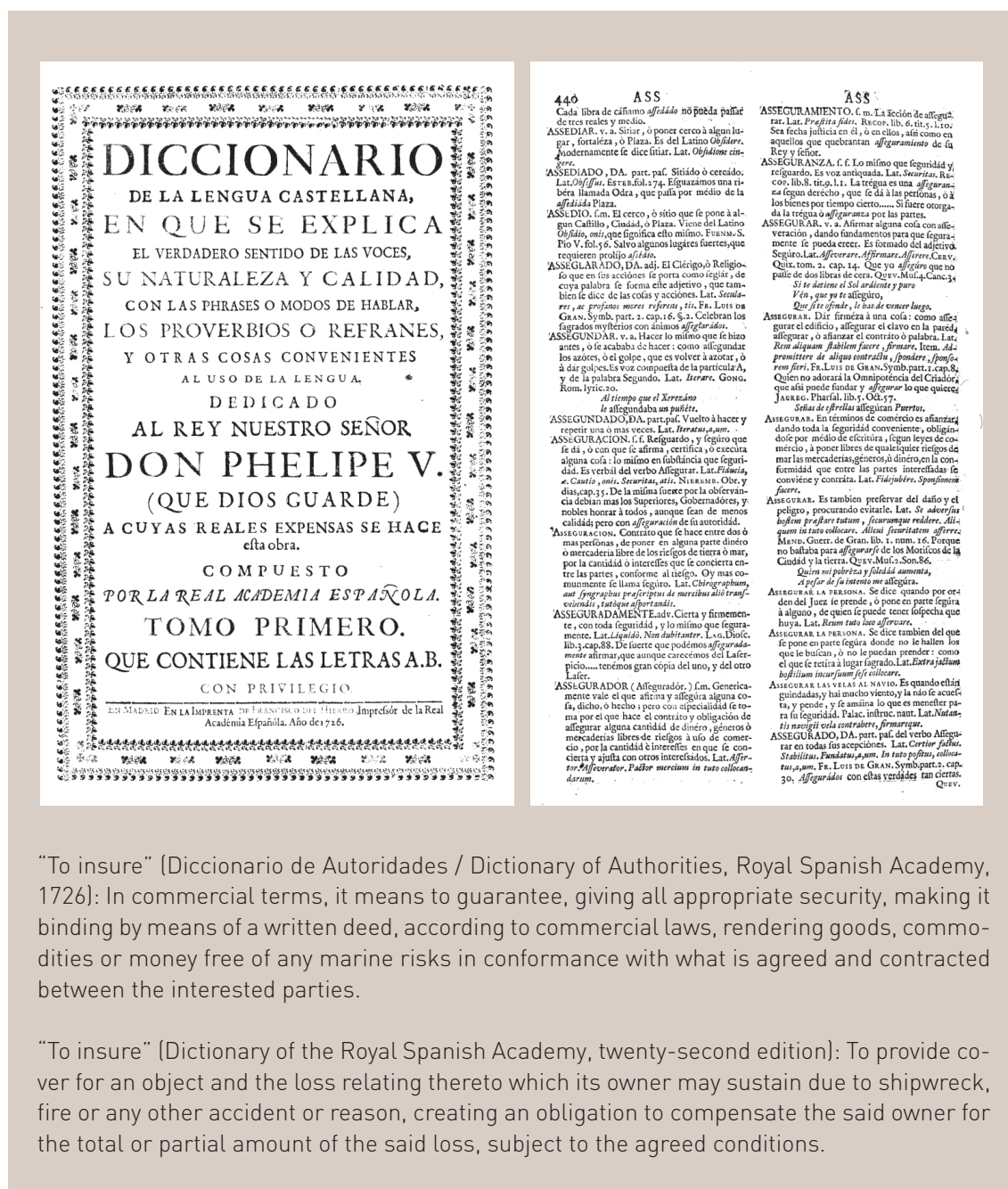
(whether physical or intellectual) and incorporate it into their personal heritage, being “convinced” of its significance and implications and articulating it as an organized entity which lends structure and meaning to its separate “parts”.

Mutatis mutandis, organizations also learn, develop experience and generate knowledge, which they then explain and transmit. This is what has taken place in MAPFRE Group which, moreover, has established a characteristic corporate culture based on the development

and dissemination of what may contribute to improve the practice of insurance science.

It would be impossible to end this article without offering some words of sincere thanks to those who have turned this exciting project into a reality: Ignacio Hernando de Larramendi, Julio Castelo Matrán, José María Pérez Escacho, Antonio Guardiola Lozano and those responsible for the latest expanded and revised edition: María Luisa Castelo Marín and Julio Torralba Martínez. We should also mention the contribution of José Jurado, who translated all the terms into English.

Organizations learn, develop experience and generate knowledge, which they then explain and disseminate



“To insure” (Diccionario de Autoridades / Dictionary of Authorities, Royal Spanish Academy, 1726): In commercial terms, it means to guarantee, giving all appropriate security, making it binding by means of a written deed, according to commercial laws, rendering goods, commodities or money free of any marine risks in conformance with what is agreed and contracted between the interested parties.

“To insure” (Dictionary of the Royal Spanish Academy, twenty-second edition): To provide cover for an object and the loss relating thereto which its owner may sustain due to shipwreck, fire or any other accident or reason, creating an obligation to compensate the said owner for the total or partial amount of the said loss, subject to the agreed conditions.

interview to **Commander Juan Antonio Aguilar**

Frigate Captain BIO Hespérides



Hespérides vessel in the Antarctic

Frigate Captain Juan Antonio Aguilar Cavanillas was born in Madrid (Spain) in 1960. He joined the Spanish Naval Academy in 1980, and was commissioned as ensign of the Royal Spanish Navy in 1985. He is a systems analyst and specialist in hydrography, and was awarded a diploma in operational research by the Naval Postgraduate School of Monterey, California. He has served on the corvette DIANA, the training ship JUAN SEBASTIÁN DE ELCANO and the hydrographic ship MALASPINA, of which he was Second Officer.

On land, he has held posts in the Fleet Tactical Programs Center, the Navy's Cabinet of Operative Military Research (GIMO) and the Naval Hydrographic Institute. He has been commander of the POLLUX and MALASPINA hydrographic ships. He has been the Commander of the HESPÉRIDES oceanographic research ship since 18 June 2009.



“The Antarctic Treaty expresses the intention that the ice continent should continue to be used solely for peaceful purposes”

It might seem that there is nothing left to discover on our planet, and indeed that no international agreements are respected. Nevertheless, the ice of the Antarctic and the waters that surround it still hold some keys to understanding the behaviour of the Earth and to forecasting how it will develop. Moreover, this continent is the subject of the Antarctic Treaty which -since 1961- has guaranteed its neutrality as well as the protection of its environment and the natural resources in which it abounds. But in order to carry out research in this glacial region, it is necessary first to reach Antarctica and then to be able to rely on a human team backed up by highly sophisticated technical equipment. Thanks to the detailed explanations given by Commander Aguilar in this interview, we shall learn how the Spanish vessel *Hespérides* is making it possible to accomplish this important international scientific mission.

12 March 2010 marked 20 years since the launch of the *Hespérides*, prompting us to wonder how the idea of building a vessel for the purpose of international oceanographic research took shape in Spain. Does the name *Hespérides* have any particular significance?

The idea of building the *Hespérides* materialized during the Second Week of Marine Studies held at Cartagena (Murcia-Spain) in November 1984, following Spain's signing of the Antarctic Treaty two years previously. During that week, there were discussions which led to the conclusion that it would be appropriate for Spain to have an oceanographic vessel

with Antarctic navigation capabilities, due not only to our presence on that continent in the form of the Juan Carlos I Base and the Gabriel de Castilla station, but also to the interest shown in it by Spain's scientific community.

The name of the ship alludes to Greek mythology. The *Hesperides* were nymphs who guarded the Tree of Knowledge, which is also the logo of the Spanish National Research Council (CSIC).

Which organizations finance your activities, and which areas of knowledge are covered by your research projects?

The *Hesperides* were nymphs who guarded the Tree of Knowledge, which is also the logo of the Spanish National Research Council (CSIC)





Juan Carlos I Antarctic Base on Livingston island. MICINN

The ship carries out a wide variety of tasks covering the different fields of oceanographic research: hydrography as well as biological, geological and seismological studies, and research into marine physics and biochemistry

The scientific research undertaken on board the *Hespérides* is basically directed and financed by the National Research and Development Plan; responsibility for the scientific management of the vessel (as part of the "Major Infrastructure") lies with the Ministry of Science and Innovation (MICINN) acting through the Commission for Coordination and Support for the Activities of Oceanographic Vessels (COCSABO). Various bodies from other ministries also participate in this Commission.

The logistical support and the technical and scientific personnel required to undertake the missions are provided by the Marine Technology Unit (UTM) of the Spanish National Research Council (CSIC). It should be remembered that the vessel and its equipment both belong to the Spanish Navy and this also entails the presence of the Ministry of Defense.

The ship carries out a wide variety of tasks covering the different fields of oceanographic research: hydrography as well as biological, geological and seismological studies, and research into marine physics and biochemistry, to mention only a few.

Which scientific work can be undertaken with the equipment available on board?

The *Hespérides* oceanographic research vessel accommodates several laboratories where research can be undertaken in various scientific disciplines; these include a low-temperature laboratory (kept at -20°C), what is known as the "Wet Process Unit" with a continuous distribution circuit for surface seawater, and one laboratory which is specifically equipped for work with radioactive isotopes, with capacity for storing the waste residues produced.

Key items of the permanent scientific equip-



Hespérides vessel in the Antarctic

ment on board include two multibeam echosounders, one for deep water down to 11,000 meters (EM-120) and the other for shallow water down to 600 meters; two monobeam echosounders, the EK-60 to quantify biomass and the EA-600 for bathymetric/hydrographic work, one TOPAS seismic profiler with sediment penetration capability of up to 250 meters, one Acoustic Doppler Current Profiler (ADCP) and two seismic shooters.

One of the most frequently used items of equipment is the CTD dipping sounding line, which can reach depths of as much as 6,000 meters to collect samples of water simultaneously at different levels; this is normally used to measure conductivity, temperature and turbidity and for fluorometry. We can also use 10- and 20-foot containers to carry other items, in particular the equipment used on our seismic assignments (shooters and streamers, or marine cables). The vessel

can also launch radiometers, fishing nets, drift bottles, corers (used to obtain samples from the seabed with lengths of up to 10 meters) and trawls to obtain samples from the seabed as well as the rest of the water column.

The ship also has a meteorological station linked to the TERASCAN system, which can receive and fully process real time data from satellites in the NOAA (National Oceanic and Atmospheric Administration) series, and can also handle various levels of processing for data from other satellites: GOES, GMS, METEOSAT, FY, DMSP, ERS, SPOT and CZCS.

How is the route of the Hespérides vessel tracked from land and how are communications handled?

The vessel has various satellite communication systems -INMARSAT, SECOMSAT, IRIDIUM and TERASCAN- which can receive



Ice navigation calls for some specific operating methods and safety precautions, especially in areas where cartography is poor and often inaccurate

and fully process real time data from satellites in the NOAA series. This provides cover with global capacity, including high latitudes. It also has VHF, UHF and HF radio voice and data communication equipment.

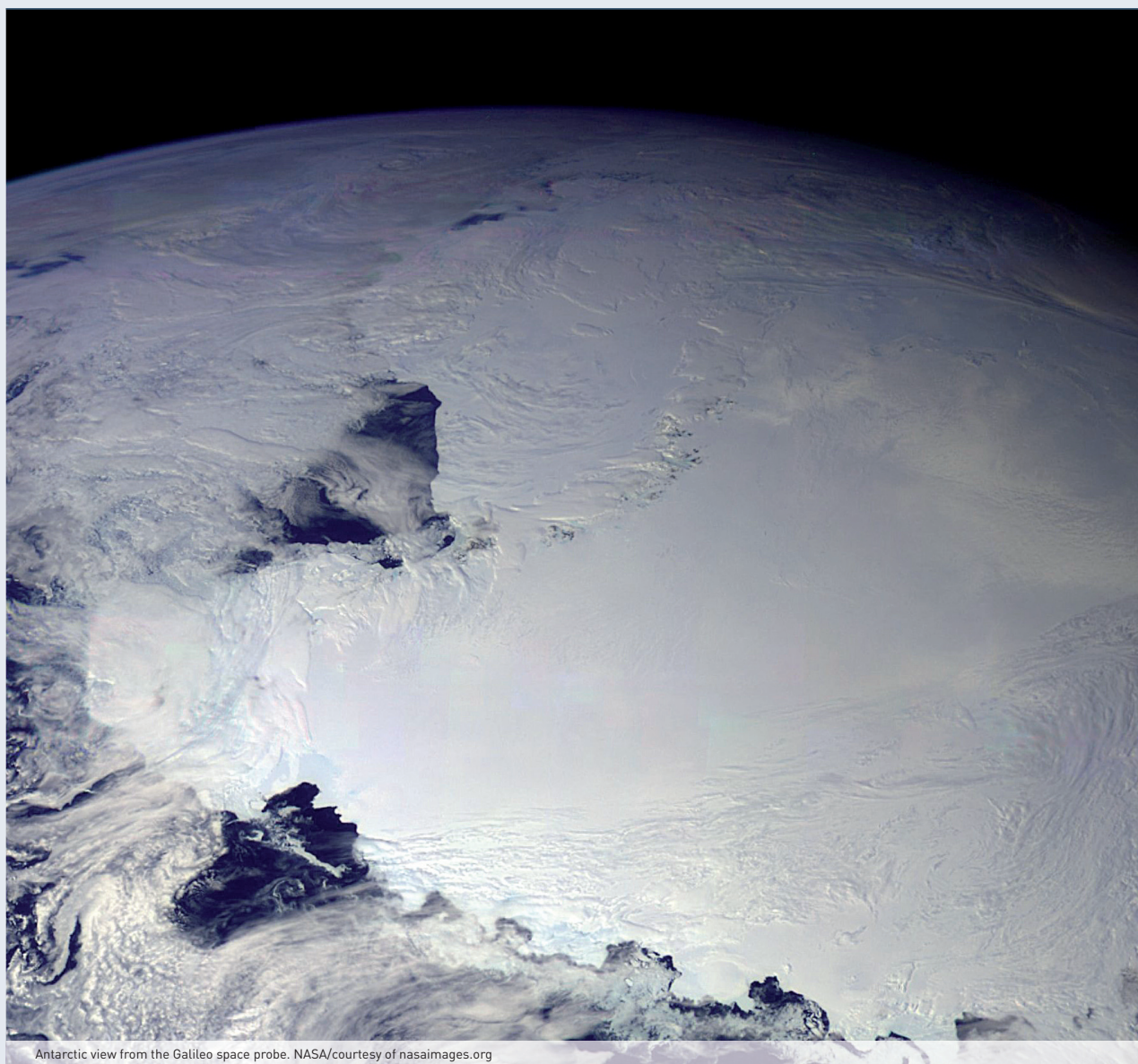
What logistical support is provided by the *Hespérides* vessel and its crew for the Spanish Antarctic bases, “Juan Carlos I” on Livingston Island and “Gabriel de Castilla” on Deception Island?

In actual fact, logistical support for the Antarctic bases is mainly provided by another Spanish Navy vessel, the *Las Palmas* oceanographic research ship. This vessel is responsible for transporting staff and supplying water, food and spare parts to the bases, and for removing waste. Nevertheless, the

Hespérides often assists the Spanish bases and others belonging to other countries, for example by transporting relief staff.

Who draws up the safety documentation for the *Hespérides* vessel? Which particular procedures are required for navigation in Arctic and Antarctic waters?

Navigation in waters where there is ice calls for some specific operating methods and safety precautions. We must also bear in mind that these are areas where cartography is poor and often inaccurate. All these factors, together with the fact that GPS positioning systems are not reliable at these latitudes, make it necessary to establish special navigation procedures. The documentation for polar navigation is drawn up by the vessel crew on



Antarctic view from the Galileo space probe. NASA/courtesy of nasaimages.org

the basis of lengthy experience on board the *Hespérides*, and it is subsequently approved by the Navy. The officers of the *Hespérides* also attend specific courses on polar navigation in Chile and Argentina.

How does insurance cover operate in cases of general average, towing, collision or other more complex situations?

In fact, the *Hespérides* vessel is not insured by any company as such, because it is a vessel that belongs to the Spanish Navy which manages all actions to be taken in case of an exceptional event of this sort.

What health and medical cover can be provided for personnel on board if necessary? And what happens if personnel have

to be transferred to land or repatriated to Spain?

A doctor and a medical assistant are always on board during our missions. The vessel has a sick bay for primary medical care, and an X-ray room. If personnel have to be transported ashore or repatriated, the Navy handles all the transfers. If an emergency evacuation by helicopter became necessary, it would be coordinated with the marine rescue services of the relevant country, or its navy. I should point out that everyone has to pass a specific and mandatory medical examination before embarkation.

The Navy personnel have a group insurance policy taken out by the Ministry of Defense. Civilian personnel on board also have their own policy.

The Antarctic Treaty

This is a composite framework of legal regulations at international level. It recognizes the Antarctic as a region of interest for the entire human race, and expresses the intention that it should continue to be utilized solely for peaceful purposes, and should not become the scene or subject of international disagreement. Various other accords have been drawn up to flank the Antarctic Treaty: the Protocol on Environmental Protection to the Antarctic Treaty, the Convention for the Conservation of Antarctic Seals, the Convention for the Conservation of Antarctic Marine Living Resources and the Convention on the Regulation of Antarctic Mineral Resource Activities, all of which make up the Antarctic Treaty System.

The Antarctic Treaty was drafted in 1959 and came into force in 1961. It was initially signed by the governments of Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, the former USSR, the UK and the USA. Further countries then acceded to the treaty in two categories: consultative parties (up to a total of 28) and acceding parties (19 countries).

Spain signed the Antarctic Treaty in 1982 and became a consultative party in 1988. Like the other members, Spain is committed to global protection of the environment and the dependent and associated ecosystems. It also undertakes to contribute toward the establishment of a sound basis to continue and develop international scientific cooperation in the Antarctic, underpinned by freedom of research. For this purpose, Spain has two scientific stations. One of these is managed by the Ministry of Science and Innovation through the CSIC: this is the "Juan Carlos I" Spanish Antarctic Base, located on Livingston Island. The second station is managed by the Ministry of Defense through the Spanish Army: this is the "Gabriel de Castilla" Spanish Antarctic Base, located on Deception Island. To support these bases, as mentioned above, we rely on the Las Palmas oceanographic research vessel as the main logistical support ship, and the *Hespérides* oceanographic research vessel also provides support as necessary, bearing in mind that its main mission is oceanographic research in the waters near the Antarctic continent.

Let's talk about some difficult situations that the Hespérides oceanographic research vessel has experienced. Is it true that it had to assist a tourist boat in Antarctic waters in February 2009?

Yes indeed, the inclement Antarctic climate and the difficulties of navigation in polar regions sometimes lead to complex situations for vessels working in this area.

In February 2009, we received a call for help from the Marine Rescue Service at Ushuaia (in southern Patagonia, Argentina). A passenger vessel had run aground on the coast of Audrey Island. The katabatic winds blowing down from the glaciers and the sea current made it impossible to refloat the ship. As we were the nearest vessel, we went to assist. The divers from the Hespérides reconnoitered

the hull to assess the situation and to look for any holes below the water-line or fuel leaks. We continued to support the ship until all the passengers could be evacuated and later on, when the tide came in and the weather conditions improved, it was able to leave.

Are there any other ships in the world that carry out oceanographic research, so that scientists can be exchanged and knowledge and experience can be shared?

In Spain alone, there are 18 other vessels that carry out oceanographic work. Some of them belong to the Spanish Oceanographic Institute, and others are operated by the CSIC, SEGEPECA (General Secretariat for Marine Fisheries) and also the Naval Hydrographic Institute. However, it is true that the

Hespérides vessel on the Antarctic



Hespérides is the most important of these ships, the one with the best multidisciplinary versatility, and the only one that is able to navigate polar waters.

Many of the major world powers are involved in oceanographic research, and countries such as the USA, France, the UK and Canada have large fleets.

We often carry scientific personnel from foreign organizations on board the Hespérides, thanks to cooperation among various universities. And we frequently carry an observer when we are working in waters belonging to other countries. Last year, we were accompanied by researchers from France, the UK, Germany, Portugal, the USA, Brazil, Chile, Argentina and China.

The Hespérides is the most important Spanish oceanographic research ship, the one with the best multidisciplinary versatility, and the only one that is able to navigate polar waters

A crew aboard a “green ship”

All the crew are of Spanish nationality except for one sailor who is a national of Uruguay; the crew comprises the commander, 10 officers, 10 non-commissioned officers and 35 petty officers and seamen, including four women.

The vessel also has capacity to carry 37 additional passengers as technical and scientific staff.

As regards waste management, the vessel is equipped to comply with the strictest requirements of the Antarctic Treaty. Waste is separated on board and the ship is equipped with a crusher, an incinerator and a compactor so that it can be stored on board until arrival in port. There is also a waste water treatment plant on board. We can proudly claim that the Hespérides vessel is a “green vessel”.



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interview to **David Trueba**

Journalist, writer, actor, scriptwriter,
film and television director



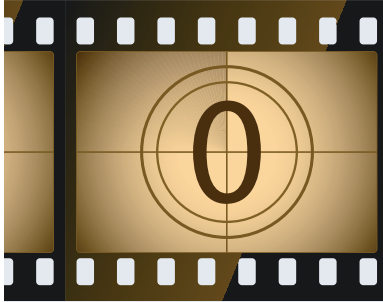
David Trueba was born in Madrid in 1969 and studied journalism at Universidad Complutense in Madrid.

He is a press contributor. His weekly articles for *El Periódico de Catalunya* are collected in the anthology entitled *Tragarse la lengua y Artículos de ocasión*, published by *Ediciones B*. He is currently a TV columnist in *El País*.

He also works in television; he was the co-director of *El Peor Programa de la Semana* (1993-94) and he filmed *Qué fue de Jorge Sanz* (2010), a six-episode series for *Canal Plus*.

Regarding cinema, he has worked on the scripts of films such as *Amo tu cama rica* (1991), *Los peores años de nuestra vida* (1994), *Two Much* (1994), *Perdita Durango* (1997), *La niña de tus ojos* (1998), and on the documentary *Balseros* (2003), which was nominated for the Oscar for the best documentary of 2004. Films on which he worked as director and scriptwriter include *La buena vida* (1996), *Obra Maestra* (2000) and *Soldados de Salamina* (2003), *Bienvenido a casa* (2006) and *La silla de Fernando* (2006). He has also launched his career as an actor by appearing in at least nine Spanish films, such as *Airbag* (1997), directed by Juanma Bajo Ulloa.

As an author, he has written three novels, all published by the Anagrama publishing house: *Abierto toda la noche* (1995), *Cuatro amigos* (1999) y *Saber Perder* (2008), which was awarded the National Critics' Prize in 2008 and was shortlisted for the Médicis Prize in its French version. His novels have been translated into ten languages.



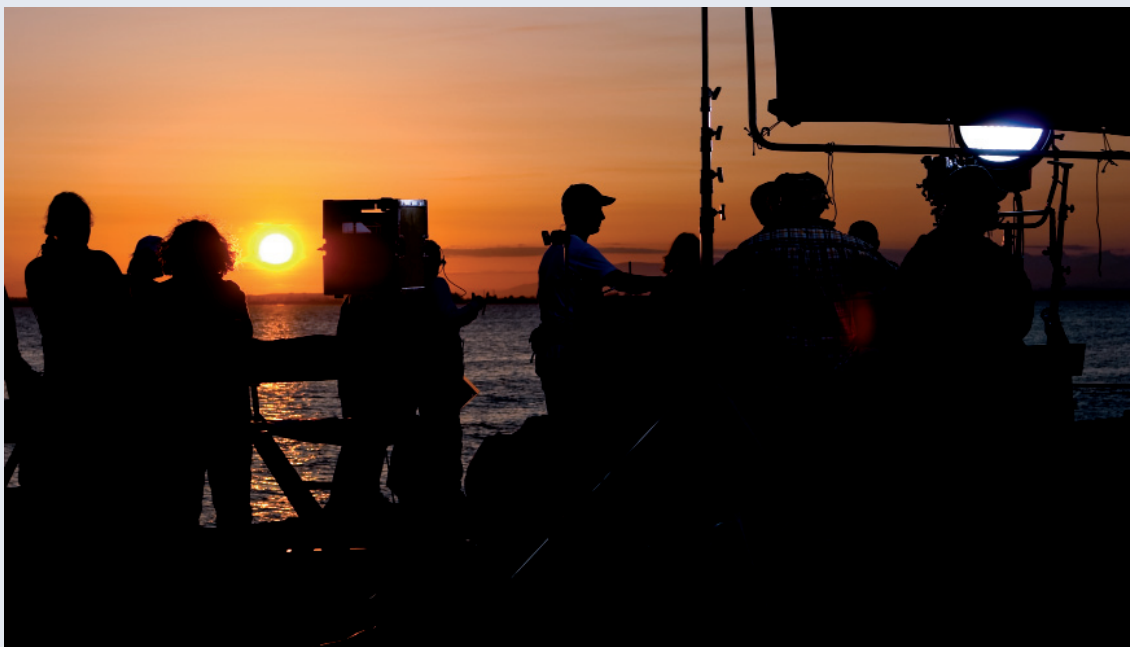
“When facing risk, I trust my instincts”

In your first novel, *“Abierto toda la noche”* (1995), a multiple-viewpoint novel which seems to include some autobiographical elements, one of the characters -the father- is an insurance sales agent. Does that profession evoke any family memories for you? How would you describe them?

Of course, my father was a door-to-door salesman for Ocaso Insurance for many years, almost ever since I was born (I was his eighth child). He tramped all around a district of Madrid including Aravaca and Pozuelo, and since he did not make enough money from insurance to feed us all, he became a sort of doorstep salesman for almost anything, from typewri-

ters to watches and bracelets. My father made a good living as a door-to-door salesman, because he was friendly, pleasant and full of good intentions. His customers were very humble people - people who could only afford a watch by paying in installments for two years. I remember that my father always told me that you can trust humble people, they never leave a bill unpaid; on the other hand, he said that rich people do not understand the value of things or the sacrifice they require, so he tried not to have them among his clientele. What is more, my father does not at all resemble the father in that novel; for me, he was more like the grandfather I never had, he was 53 years old when I

My father told me that you can trust humble people, but rich people do not understand the value of things or the sacrifice that they involve





© Pablo Hojas

**The Goya Awards
of the Spanish
Cinema Academy
produce three
times as many
losers as winners**

was born, and we had a fantastic relationship between and older man and a child in the Spain of the 70s.

During the period you spent at the American Film Institute in Los Angeles, how did the American way of life influence your way of thinking and your work?

Perhaps it prompted me to appreciate and enjoy the European model more, especially the Mediterranean lifestyle. Los Angeles is a comfortable, splendid city where I was happy but completely unknown for me. However, it lacks the street life of any major European city; people there are lonely, self-interested and sad behind their facade of success and importance. I do not like the American way of life, it is based too much on money and positions of power, and there is too much social differentiation. In

Spain, the owner of a bank and one of its employees can meet at the same places - concerts, cafes, football matches, or on a balcony somewhere. But not in America.

What did your role as Vice-President of the Cinema Academy from 2004 to 2007 involve for you personally? How would you assess the part you played?

It was an outstanding experience. I arrived amid a power vacuum and a very serious institutional crisis following the famous "No to the War" awards ceremony (referring to the Iraq war). Nobody wanted to stand as a candidate; I was a spokesman for the scriptwriters and I became Vice-President after an election in which there were no voluntary candidates. But I had to accept the post, it was a matter of rescuing an institution - yet I came up against the resis-



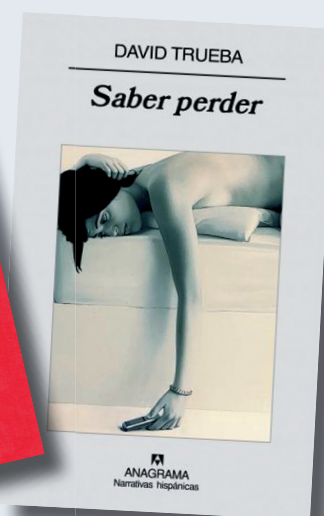
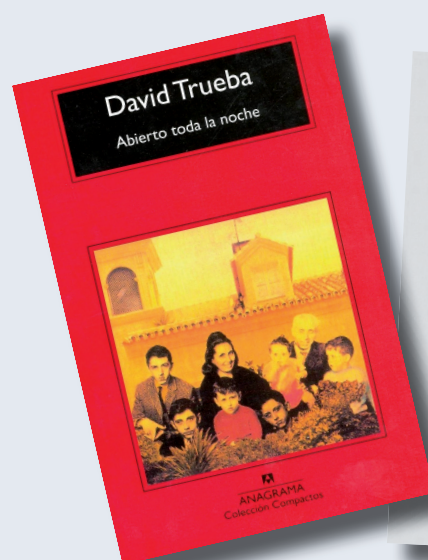
tance from people who did not want things to move or change; I think we managed to move forwards and at the end of our period of office, there were even two candidates standing for election. I came to appreciate the merits of the people who had been in charge of the Academy and the sacrifice that they had made for the group although in many cases, people were only interested in standing out mistakes and controversies. Fortunately, the new headquarters building was finished, so we were able to move into it and start offering more as an Academy than merely the Goya Awards, which produce three times as many losers as winners.

How did you manage to gain entry to intellectual circles, given that you were one of the youngest? Who are your companions, the people with whom you keep on learning, outside the universities?

I have never been a member of any "circle". What happened was that when I was young, and I had just started at university, Rafael Azcona invited me to join a lunch group that he hosted on Tuesdays; however, he warned me that this was not an intellectual "circle" but rather a meeting of friends who wanted to have some laughs and perhaps write a script. The people round the table kept changing, but listening to Azcona and laughing along with him was such a pleasure that I continued to show up. I think that relaxed chatting, conversation between the generations, is a major loss to us nowadays -we must encourage it, abandon specific age and interest groups, mix with one another more, learn to talk and persuade people, and to engage in amicable discussions. The café created a way of talking that has been lost, and when the talking stops, people usually resort to verbal violence or rebuffs. Television discussion sessions are just that- often they just consist of badly-argued irrationality.

You write excellent articles on football players or trainers. Can we say that there is a school of journalists and writers who discuss football and sports in general without indulging in "gobbledygook"?

Since the start of the last century, sports journalism has been in a class of its own. In the USA, some of the greatest writers cut their teeth by writing about baseball, boxing or fishing. In Spain, perhaps, sport has always been associated with anti-intellectualism, and that has been a mistake. In this context, I think it



is fair to recognize individuals such as Manuel Vázquez Montalbán or Gonzalo Suárez, who dared to dust down popular culture (and sport is just that) and convert it into literary material.

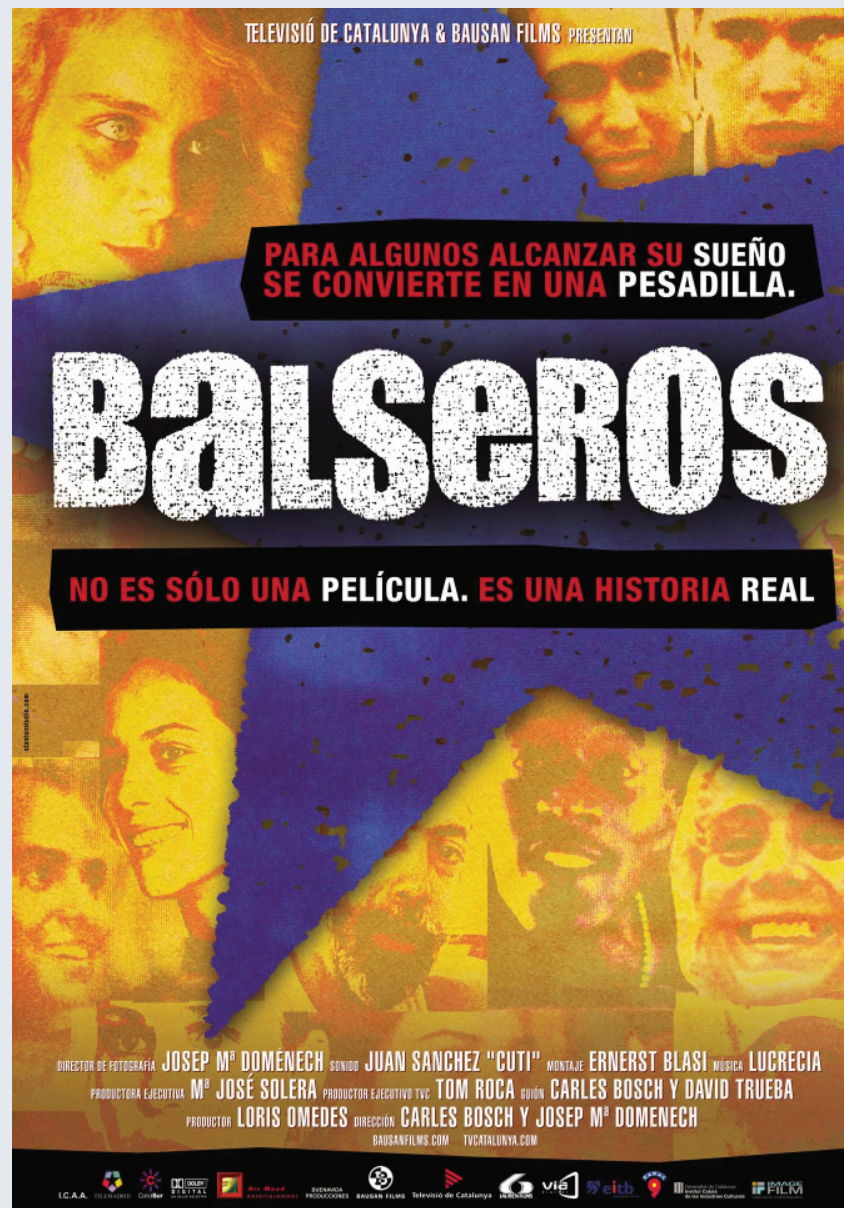
In *"Balseros"* (2003), you took part as the screenwriter. Do you think that you could make a similar documentary on the journeys of sub-Saharan emigrants to Europe across the Straits of Gibraltar?

Of course, it is a matter of waiting, choosing the right people, going along with them, and starting out with no preconceptions. You have to let people be more important than your own ideology or your armchair theories. That documentary, which I also co-produced, taught me a marvelous lesson. Its directors, Carles Bosch

and Pepe Domenech, were tenacious and patient; it was a pleasure to work with them on such a complete overview of the world of forced migration, which really is a key issue of our times.

"La silla de Fernando" in 2006, *"Rafael Azcona. Oficio de guionista"* in 2007 and now *"Qué fue de Jorge Sanz"* in 2010. This fondness for using other people's lives as your raw material - are these really documentaries, or is it a question of creating a separate genre?

They are very different things. The Fernando's film was a challenge. Luis Alegre and I intended that people who were not familiar with Fernán Gómez should be able to experience the pleasure of having a chat with him, so essentially





it is almost an interactive experience. I know people who watch the DVD again when their spirits are low and they feel like having a chat with someone. It is something that I feel proud of doing, and I am glad that I did not leave it on the shelf like some of the other projects that you set up but never decide to carry out. The Azcona film was a short program on his work as a scriptwriter; I would like to recover the full hour and a half of the conversation because as far as Rafael was concerned, talking about his work was basically the least important thing in the world; however, that was the assignment from Canal Plus and Rafael said that if I asked the questions, he would be prepared to accept. And the Jorge Sanz project is a fiction series, entertaining and daring, with a kind of humor

that people are not used to in Spain; I hope it is well received, because it aims to tackle our inability to laugh at ourselves.

Creating a story for a film, writing a novel or directing a feature film entail risks. They are inevitable, of course, but how do you deal with them? What is your attitude to risk in general?

Trust your instincts, do not take things for granted and try not to pay too much attention to fashion or to your previous work. In my line of business, I think that guidelines can start to condition you. Authenticity, and the risk of always starting from scratch, are things that should always be pursued. Do not look back. What you have already done is not important in the next film or novel. And steer well clear of

Authenticity, and the risk of always starting from scratch, are things that should always be pursued



My novels are fine as they are. I wrote them to be novels

success and acclaim, never forget that this is a manual profession - a craft.

The complex nature of a film shoot also involves a wide range of risks: people, equipment, transportation, locations and so on. How do you take these risks into account when you are planning the shoot?

It has a lot to do with the concept of "architecture". Predicting requirements and attempting to deal with mishaps without changing the original commitment. This is complicated, because it calls for a very individual sort of strength, and at the same time a considerable ability for teamwork - that is often where the friction and the problems arise. At the end of the day, choosing the right people to have around you is more important than your own character. Every film needs a different team.

The people in the team for a film shoot who are responsible for managing the specific risks involved in the activities on a day-to-day basis, and for deciding whether to buy insurance cover - do they keep you informed?

Well, as a director you have a medical examina-

tion as do the actors, and everyone who would cause the shoot to be stopped if they dropped out. I remember that when I was working with Luis Cuenca, he was already quite old and his health was in such a precarious state that the insurance companies would not sign the clause for him; but in a case like that, you have to take the final decision and for me, the pleasure of filming him -and he was in my films until the day he died- far outweighed any risk that I had to take on. Audiences like you to film special, unusual people.

Scriptwriter, novelist, author of articles, actor and film director - When will you turn your hand to production? Have you ever thought of putting one of your novels on the screen?

No, my novels are fine as they are. I wrote them to be novels, not films. But in the cinema, it is essential to become a producer, it is the only way to generate your own projects, rather than becoming somebody else's paid hand working on other people's projects. Eventually, you start to understand what finance is all about. The age of the great Hollywood studios is over. From the 1960s onwards, the major writers have had to be director-producers.

If we want to enjoy your next work, will we have to go to the cinema or to a bookshop?

I do not know yet. Sometimes you start at one point, but then you think of another project and it becomes uppermost in your mind. What I do know is that I shall be doing things, I like doing things; in my work, you do not have to dream - you have to do things, to tackle the job - and do not let anyone tell you otherwise. This is a trade like any other, it involves effort and tenacity, and putting in the hours. Last summer, for instance, I shot a film called "*Madrid, 1987*". The television channels offered no financing and they were not enthusiastic but the actors and my technicians were; so, under very difficult conditions but with absolute dedication, we shot the film as cheap-ly as we could, and with superb commitment. What will happen to this film now, when I finish editing it? I do not know, I do not have any distribution or support, but now it is finished - mission accomplished. This is the great joy of doing something, when you are confronted with defeat due to despair or resentment because nothing moves. I hope to maintain this strength of spirit as long as I keep my physical strength.



David Trueba, during the shooting of his film "*Madrid, 1987*", at Café Comercial in Madrid

agenda

COURSES ORGANISED BY MAPFRE RE

Course	Method	Date	Venue
International Seminar	Attend in person	27th June-1st July 2011	Madrid, Spain

COURSES ORGANISED BY ITSEMAP STM (SERVICIOS TECNOLÓGICOS MAPFRE, S.L.)

Course	Method	Date	Venue
Basis on Environmental Risk Management	Attend in person	27th-29th September 2011	Barcelona, Spain



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