

WATER CRISIS IN MEDITERRANEAN SPAIN: WATER POLICY AS A GOSPEL OF REDEMPTION

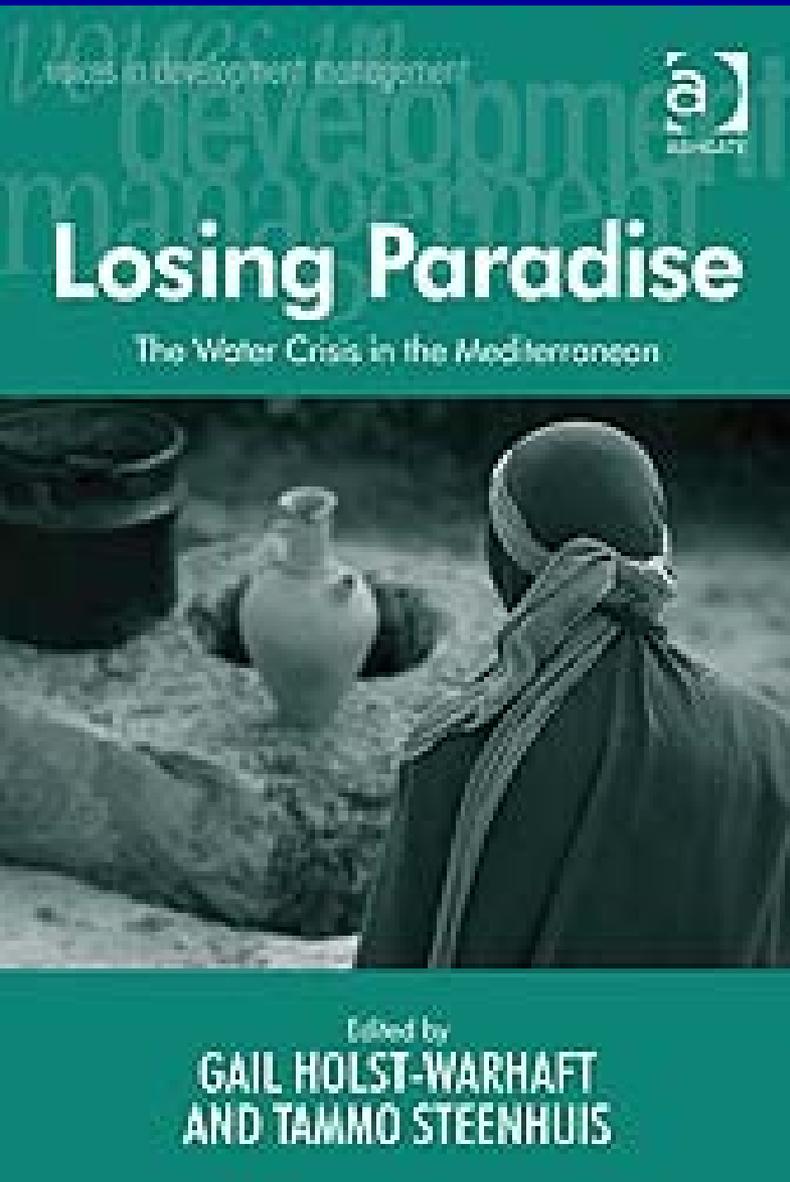
“Only the Bible, however, is fundamentally concerned with the macropolitics of regimes- the grand politics that guide and shape the behaviour of leaders and followers”.

(Aaron Wildavsky.- *The Nursing Father. Moses as a Political Leader*)



**Gaspar Mairal,
Universidad de Zaragoza (Spain)**

What is Water Crisis?



Water Crisis in Spain?

Chapter 2

Water Policy as a Gospel of Redemption

Gaspar Mairal

Only the Bible, however, is fundamentally concerned with the macropolitics of regimes – the grand politics that guide and shape the behaviour of leaders and followers.

Aaron Wildavsky, *The Nursing Father: Moses as a Political Leader*

Water Policy

Public policy has become a significant field of research in the area of Cultural Anthropology. Policy brings the wider world into contact with the local, and it is because of this that Anthropologists have stressed the local in their analyses. The ethnographic tradition of the discipline has reinforced this local view by revealing the weaknesses of policy measures that fail to take account of the cultural dimension and social impact of mega-development projects in specific communities and territories (Cernea 1991). A different approach also exists, however, which seeks to identify the cultural foundations of public policy. It is quite wrong to assume that public policy, based as it is on expert thinking, only has room for scientific contributions, relegating cultural input to a marginal status, a discretionary matter at most. According to this view, culture is considered a matter for the people and science and technology for the experts, for large organizations and for government. I take a different stance, however, seeking to show how the cultural underlay of public policies hybridizes scientific, technical and cultural concerns. Water policy is an outstanding example, and I shall base my argument on the manner in which development in this area was managed in Spain in the late 19th century and throughout the 20th, at the same time establishing a significant comparison with the situation in the United States. This comparison is based on a coincidence of historical circumstances.

At the end of the 19th century, the USA, having won the West, found itself in possession of vast, arid lands that could only be dominated by transforming millions of acres into fertile farmland, a goal that could only be achieved by irrigation. It was the Mormons of Utah who took the lead in making a garden of the desert. Most of the territory of Spain, meanwhile, belongs to the Mediterranean basin. The climate is dry and the land arid, and agriculture has always been constrained by drought and limited crop yields. The defeat suffered by Spain at the hands of the USA in the Cuban War, which concluded with the treaty of Paris in 1898, put an end to the Spanish colonial empire. This in turn triggered a national crisis as the country's elites tried to come to terms with their awareness of Spain's decadence,

Spain is experiencing a long transition between a 20th Century water policy model, the so called “**Política Hidráulica**”, and a “**new one**”, not completely defined yet.

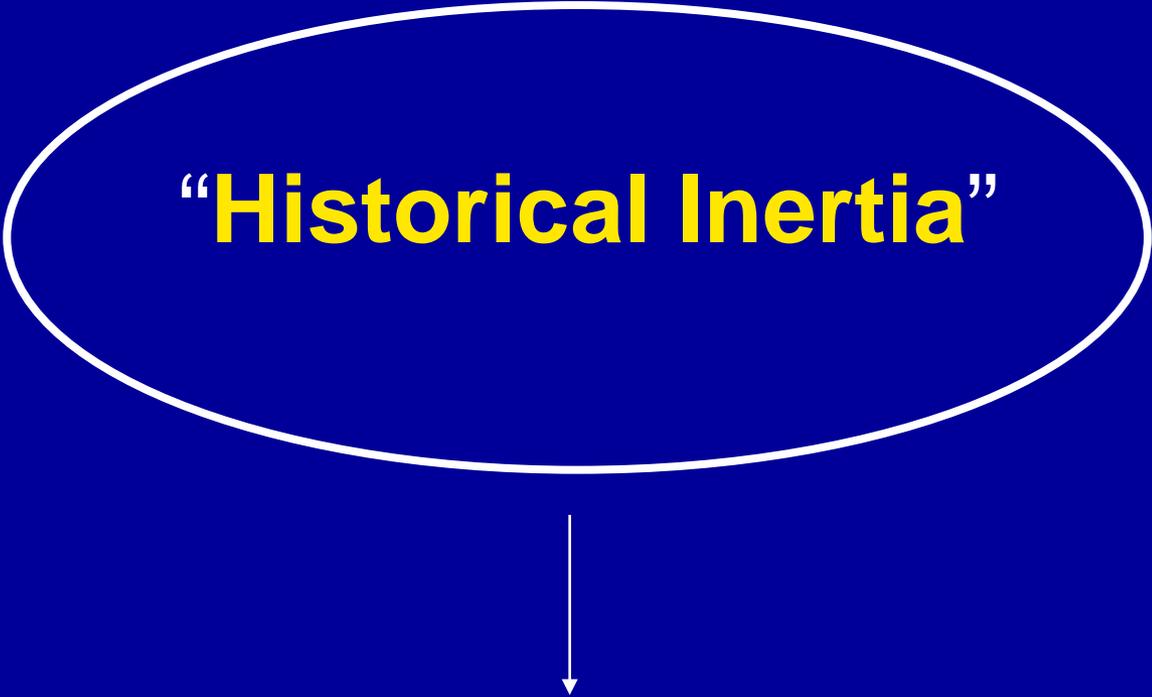
The “política hidráulica” has been defined as a “works policy” conducted by politicians and engineers and strongly supported by irrigators and hydro electricity companies.

A “new” Water Policy is usually defined as a “management policy” sustained by multidisciplinary knowledge, environmentalism and with a significant public participation.

Spanish Water Scenario

- This transition is being very long and complicated due to the “**historical inertia**” that is still acting in the Spanish water scenario.
- This “historical inertia” reinforced when the Spanish National Hydrologic Plan (2001), including the construction of a 1.100 Hm³ water transfer from the Ebro River to the Mediterranean coast, was approved and provoked a very strong social and political controversy around this new water transfer.
- In 2004 and after the electoral victory of the Socialists, a new government cancelled this water transfer and introduced substantial reforms to this Plan.
- By then the water policy had become one of the main issues of the Spanish political agenda. Now when Spain has been caught by a very serious economical crisis, this issue is still a very important one.

“Historical Inertia”

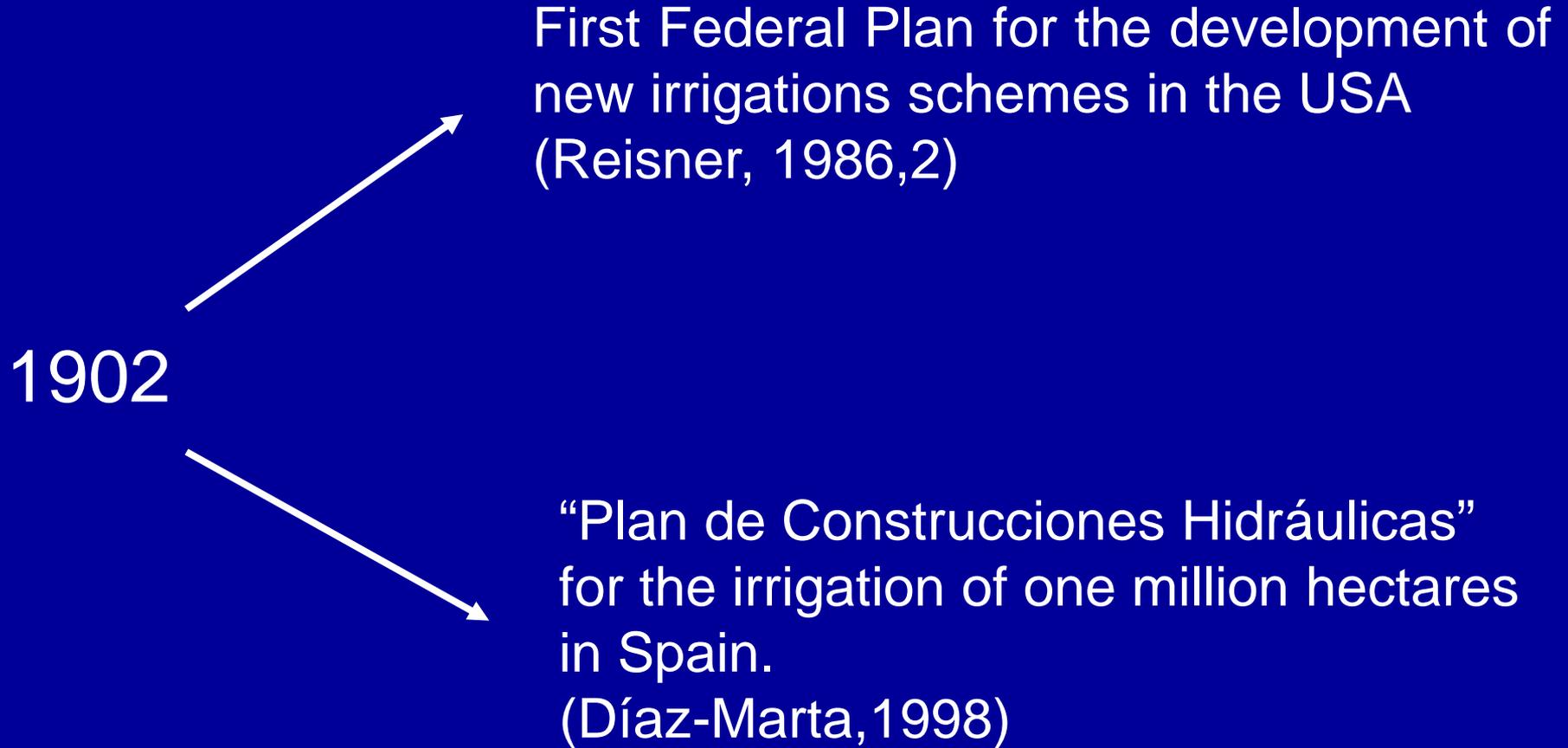


How this “política hidráulica” was born?

Historical Context

- At the end of the 19th century, the USA, having won the West, found itself in possession of vast, arid lands that could only be dominated by transforming millions of acres into fertile farmland, a goal that could only be achieved by irrigation. It was the Mormons of Utah who took the lead in making a garden of the desert.
- Most of the territory of Spain, meanwhile, belongs to the Mediterranean basin. The climate is dry and the land arid, and agriculture has always been constrained by drought and limited crop yields. The defeat suffered by Spain at the hands of the USA in the Cuban War, which concluded with the treaty of Paris in 1898, put an end to the Spanish colonial empire. This in turn triggered a national crisis as the country's elites tried to come to terms with their awareness of Spain's decadence, which by this time had reached a nadir.
- If the USA was now an expanding great power, Spain was a shadow of its former glory. In both cases, however, water policy emerged as a driver of change. In the United States it provided an opportunity for the nation's expansive surge as the West was colonized, while in Spain it offered the chance for an exhausted nation to regenerate and emerge from the depths of its crisis.

1902



First Federal Plan for the development of
new irrigations schemes in the USA
(Reisner, 1986,2)

“Plan de Construcciones Hidráulicas”
for the irrigation of one million hectares
in Spain.
(Díaz-Marta,1998)

Towards the end of the 19th century Spain was in the throes of a deep-seated crisis which particularly affected agriculture. From these conditions would spring a well-constructed proposal based on a representation of the salvation of Spain and the Spanish people. **Joaquín Costa** was the creator and the great advocate of this proposal. Spain was to be saved from poverty, neglect and emigration by harnessing its water resources and transforming the land through irrigation. In itself, this is no more than another technical and political proposal,

What was new and original, however, was how Costa in particular presented it to the people at large, wrapped in brilliant, biblically inspired rhetoric, which identified the arid land with a present defined by failure and pictured the same fields reawakened by life-giving water as a kind of “promised land” of future prosperity. This was the “promise of water”

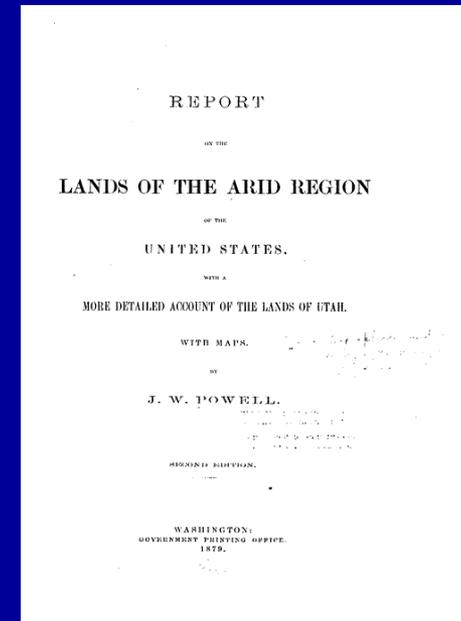
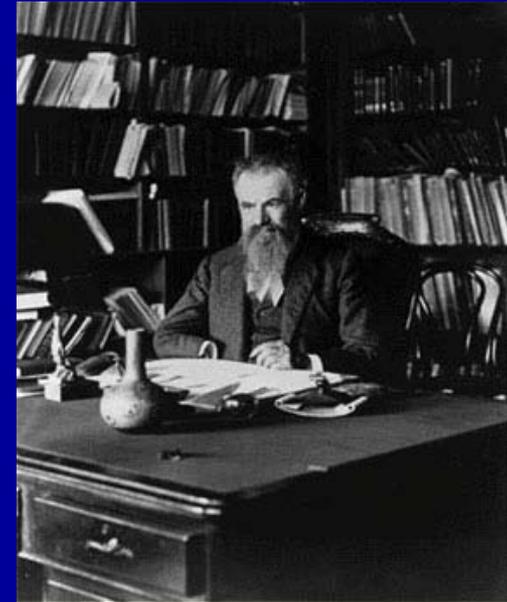
Joaquín Costa, jurist and politician, campaigned at the end of the 19th century for the reform and regeneration of Spain. He was intensely active in promoting the construction of new water infrastructure such as dams and canals in order to increase the area of land under irrigation and modernise Spanish agriculture. He died in 1911 although his idea of a new water policy would live on, profoundly influencing the measures implemented in Spain over the course of the 20th century.



“**Promise of Water**”

John Wesley Powell (1834-1902)

“About two-fifths of the area of the United States is so arid that agriculture is impossible without artificial irrigation, the rainfall being insufficient for the fertilization of ordinary crops. In this region all agriculture depends upon the use of running streams. In all of this country, wherever agriculture is prosecuted, dams must be constructed, and the waters spread upon the lands through the agency of canals. Again, as the season of growing crops is comparatively short, - in most of the country it lasts from two to three months only, - the waters of the non irrigable season will run to waste unless they are stored in reservoirs. Already the storing of these waters is begun; the people are constructing reservoirs, and will continue the process until all of the streams of the arid region are wholly utilized in this manner, so that no waste water runs to the sea.” [Powell, 1889:152]



Joaquín Costa (1846-1911)

Política hidráulica (Misión social de los riegos en España)

“The basic condition for social and agricultural progress in Spain today is bound up with the construction of pools and reservoirs of rain and running water. These works must be built by the nation and this Congress must urge our parliament and government to address the issue, asserting its place as the supreme aspiration of Spanish agriculture” (Costa: 1880)



Principles for “Hydraulic Policy”

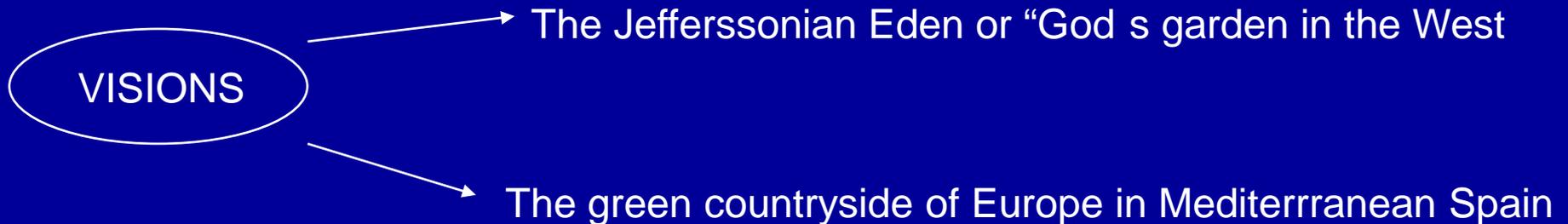
On both sides of the Atlantic, Powell and Costa expressed very similar ideas, though neither had any knowledge of the other. Both argued forcefully that the future of agriculture in an arid land depended on building large dams and reservoirs to store water and irrigate the fields in the dry seasons, the very time when crops could be grown.

New Water Policy → but, was it really new?

1. Hydraulic Policy as a programme for national development.
 2. Intense application of science and technology.
 3. A State policy
- Water must be made the axis around which the whole society, the economy, politics and culture must turn.
 - Water is not a sectorial policy, but the “grand” policy that shapes the “macropolitics of regimes” as Wildavsky puts it, and mobilizes a whole society in pursuit of wealth and happiness

New visions and landscapes

- Both Powell and Costa developed their hydraulic ideas for the production of a new landscape in the American West and Spain.
- Powell's ideas for a new water policy were thus inspired by a fresh approach to the Jeffersonian ideal that would allow the fundamental tenets of the American revolution to work in the arid West and then farmers could cultivate there a God's garden. What should be the extensions of that garden? The 160 acres.
- The transformation of the dusty plains of Spain into a lush, green European countryside had become Costa's dream, but it was a dream that he sought to make a reality through his hydraulic policy.



A Moral Vision of Desert

The extreme aridity of the land inspires a “moral” vision, and any humanizing action therefore represents an extraordinary and praiseworthy effort. The symbolic apparatus of religion helps to emphasize and represent this giant task. The transformation of the desert into a bounteous garden is an old story told in its original form in the Book of Exodus, which describes how Moses led the Israelites across the desert to the Promised Land. Mesopotamia, the wealthy land between the Euphrates and the Tigris is also mentioned in the Bible as the homeland of Abraham. My contention is that both Powell and Costa used these stories mainly with expressive intent.

The Bible and the Exodus as a story to tell a “promise of water”

A “Messianic” Effort

- “ Everything depends on the manipulation of water- on capturing it behind dams, storing it, and rerouting it in concrete rivers over distances of hundred of miles. Were it not for a century and a half of messianic effort toward that end, the West as we know it would not exist [Reisner, 1987:3]

A Gospel of Redemption

POWELL

- “The arid lands of the West, last to be redeemed by methods first discovered in civilization, are the best agricultural lands of the continent . Not only must these lands be redeemed because of the wants of the population of that country, they must be redeemed because they are our best lands. All this is demonstrated by the history of the far West, and is abundantly proved by the history of civilized agriculture. All of the nations of Egypt were fed by the bounty of one river. In the arid region of the United States are four great rivers like the Nile, and scores of lesser rivers, thousands of creeks, and millions of springs and artesian fountains, and all are to be utilized in the near future for the hosts of men who are repairing to those sunny lands”. [Powell, 1890: 768]

COSTA

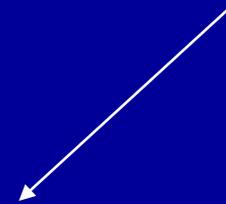
- “In antiquity, at the dawn of history, Egypt was a region of howling desert. Yet Nature poured the waters of the mighty Nile there, and that river was managed with skill and back-breaking work century upon century to transform the arid desert into a flourishing garden. (...) Here you have my thinking about Litera: it is a region to be created, and its Maker will be the River Eser”. [Costa, 1911:134]

Powell by D. Worster

“True to his parents' example, Powell was saturated with moral fervour. Like them, he aspired to transform the world into a better place. Instead of the Protestant doctrines of Wesleyan Methodism, however, he turned to those other great nineteenth-century gospels of salvation, the nation-state and natural science (...) Science was to be a means of redemption. That redemption should begin with the nation they loved, cleaning out the cobwebs of its past – the sectional rivalries, the outworn creeds, the destructive greed. Thus redeemed, America could lead the world toward enlightenment.”[Worster, 2001:437]



Costa 's epitaph



Aragon to Joaquín Costa, new Moses of a Spain in exodus. With the rod of his impassioned words he brought forth the spring of water in the sterile desert. He conceived new laws to bring his people to a land of promise. He made no laws himself.

Works to come true the “promise of water”

- The *Ley del Plan de Riegos del Alto Aragón* was passed by the Spanish parliament in 1915. The Act envisaged irrigation of 300,000 Has. equal to 25% of the total area under irrigation in Spain at the time.
- . “This implies, then, a real geographical rectification, which will everywhere transform the wretched dry land where agriculture is today impossible into a great oasis, relieving the miserable condition to which the land is condemned by a generally dry climate that allows only winter crops and meagre, insecure yields. The Aragonese steppe will become a garden.”
Proyecto de Riegos del Alto Aragón. 1913.
- “... in this region, which lies at the foot of the greatest water collector (the Pyrenees) in the Peninsula to which the Ebro gives its name, there are wide lands that have waited long ages for water and will use it with redeeming success. These steppes, punished as they have been by implacable drought (...) was where the heralds did their work and the apostles of economic redemption through water preached the word, awakening souls to conviction and hope and preparing the way for action.” [Manuel Lorenzo Pardo. 1926

Why were science, technology and economics associated with such religious rhetoric?

Leadership

- Aaron Wildavsky discusses the political value of the Moses myth in his work *The Nursing Father. Moses as a Political Leader*, in which he examines the mythical figure of Moses and his importance in the construction of political leadership. A crucial point of his argument, which I would like to stress here, is that Moses the leader disappears in the book he is given by God for his people. The discourse is where the leader who communicates the “great promise”^[2] remains, whether it is the Promised Land of the Jews, the new lands of the West for the Mormons, or the great garden into which the arid Spanish plain was to be transformed.
- Water Policy has proved fertile ground for the construction of political leadership at different times and in different contexts. The rulers discovered the political value of Water Policy, and this political practice has lasted until the present day. Despite the convulsions Spanish society underwent over these decades, the construction work that was the defining feature of the Hydraulic Policy slackened only during the Civil War, increasing continually until the latter years of Franco’s rule. In my opinion, the Hydraulic Policy was able to transcend the fault lines in Spanish society because it alluded to the myth of the “promised land”, which meant it could serve both the right and the left, offering redemption and the promise of salvation both for the sinner and for the oppressed. As a prophet of redemption through irrigation, Joaquín Costa would form a part of the pantheon of illustrious figures for both the Republicans (including the anarchists of the CNT^[3]) and for the followers of Franco, who were happy to put up monuments in his honour and name streets and buildings after him.

The 2001 National Hydrologic Plan

- In my opinion, Water Policy in Spain has been rather a way of doing politics than a policy as such, and it is because of this that it has had such a profound influence. It has resurfaced as a way of reaching and a style of exercising power, as may be observed in the Autonomous Communities of Aragon, Valencia, Murcia and Castile - La Mancha. Water is not presented as a resource, a public good or an environmental asset, but emotively as a grievance linked to the local identity of a population that hopes to see the fulfilment of the grand promise. The whole traditional rhetoric of the gospel of water that accompanied the old “Hydraulic Policy” has been revisited by contemporary politicians.
- Following In all of these cases, water ceases to be a physical resource with multiple uses that can be stored and distributed, that serves environmental and even recreational needs, to become a symbol of desire, concentrating feeling and unleashing intense emotions (Mairal, 2003). When this world of value judgments and symbols bursts upon hydraulic planning and comes to form a part of the hydraulic policies instrumented and actually implemented by government, the great paradox emerges that water is not H₂O but many things serving many different interests.

Spain and its “política hidráulica”

- The task of the anthropologist is to analyze and interpret culture, and it is for this reason that I propose a historical and cultural reading of Spanish Hydraulic Policy in the 20th century. The fact that the same policy could have driven the action of such different political regimes may, in my opinion, appear paradoxical if we do not take into account the mythical dimension and the rhetorical value of the policy as an instrument to make the myth visible as a horizon of promise. It is here that we appraise the myth. The “promise of water” had the capacity, as Aaron Wildavsky shows, to produce and reproduce leadership in a traditional society like Spain's, which was struggling to achieve modernization and Europeanization but where the religious devotion of the past still had great power. I believe that the Spanish elites have made of Water Policy, whether in the form of national plans or regional programmes, an instrument to win and wield power in a society where propaganda echoes ever more loudly through the mass media right up to the present day. It is precisely the fact that this paradoxical water policy has been reactivated, reawakening myths and promises, that defines the debate over water in Spain today.





Agua y futuro



Agua para todos



Yo también acudiré
a la manifestación

ARAGÓN, AGUA Y FUTURO

RECHAZO AL PLAN HIDROLÓGICO NACIONAL

8 de octubre, a las 12.00 horas
Plaza Aragón hasta la Plaza del Pilar

CC.OO.
aragón

 **CEPYME**
ARAGON
Entidad de la Pequeña y Mediana Empresa Aragonesa

 **UGT**
Aragón

 **CREA**
CONSEJO REGULADOR DE LA INDUSTRIA AGROALIMENTARIA DE ARAGON

AGUA
para
TODOS



PLAN HIDROLÓGICO
NACIONAL

Paradox

- In all of these cases, water ceases to be a physical resource with multiple uses that can be stored and distributed, that serves environmental and even recreational needs, to become a symbol of desire, concentrating feeling and unleashing intense emotions (Mairal, 2003). When this world of value judgments and symbols bursts upon hydraulic planning and comes to form a part of the hydraulic policies instrumented and actually implemented by government, the great paradox emerges that water is not H₂O but many things serving many different interests.

Historical inertia

- The transition in Spain from the traditional Hydraulic Policy, which was based on enormous engineering works, to the modern Water Policy based on multidisciplinary management of the resource, so necessary in today's world, is constantly skewed by the rhetoric of myth deployed by the political leaders of the Autonomous Communities in the context of the battle for power in their regions, and by the central government as a means of managing regional powers in their own partisan interests. In this light, we can only conclude that water policy in Spain remains a captive of historical forces.

Ten Issues in Spanish Water Policy

- Water Imbalance and Water Transfers
- Water Wars
- Public Participation and Contest
- Partisanship
- Future of irrigations
- Desalination
- Water Pricing and Markets
- Reform of Water Administration
- Drought
- European Union Water Directive

