From Tax to Proteins: State Fishery Policy and the Disregard of Tradition in Turkey

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In a popular review article about fisheries in Istanbul, Professor Öztürk, a leading Turkish marine scientist, asserts that Turkish fishermen, ‘unlike fishermen in European countries or in Japan, have absolutely no tradition of protecting the fishing grounds or controlling fishing areas’. I examine critically both the content and context of Öztürk’s statement. First, I will demonstrate that his claim is not correct. Historical sources provide evidence of very detailed and locality-specific customary rules for the protection and control of fishing grounds in Ottoman fisheries, particularly in Istanbul. Furthermore, ethnography on contemporary fishing in Turkey shows that, although of more limited scale and consequence, there are also living traditions for customary, locality-based restrictions on access. The historical and contemporary practices described in some detail counter the content of Öztürk’s assertion. However, I also intend to go beyond a description of practices and ask: what makes statements like Öztürk’s possible in the context of modern Turkey? Why have customary practices of restriction on access in the fisheries not been incorporated in the republican state’s approach to fishery management? I argue, basically, that this is primarily an effect of extreme futurism in Turkish development ideology.

In the first sections I provide a historical overview that tracks simultaneously the fishermen’s traditions and the changing approach of the state to fisheries from the Ottoman era until the present. What interests has the state had in the fisheries? To what degree and in what manner has the state influenced fishing practices? At a general level there has been a shift in emphasis in state policy from taxation to economic development. To the modernizing and westernizing Turkish state, production and proteins have become the main concerns and challenges in the fishery sector. The developmental ideals for the fisheries have been instrumental in instilling in the bureaucrats, managers and scientists, the idea of a decisive break between past traditions and new developments. This study surveys this developmental ideal in some detail. The growth of the Turkish marine sciences has been
intimately intertwined with this ideal. Indeed, the very existence of marine sciences as a profession in Turkey has been a result of state initiated reforms. Marine scientists have subsequently been entrusted with the role of custodians of progress in the fisheries.

State initiated reforms in the fisheries only began to have an effect in the 1950s after the main rush of reforms in Turkey. Technologically and economically the fisheries have been greatly transformed. During the 1980s and 1990s Turkish fishing in the Black Sea surpassed by far the fisheries of other Black Sea states in volume, value and technological standard. While the Black Sea fisheries were severely hit by a dramatic resource crisis in the early 1990s, the Turkish fisheries were, for various reasons surprisingly resilient during these years. Thus, it may seem that state development policies have been a success. However, the state has not infiltrated the social organization of the fisheries to the depth intended in the plans and ideals of fishery development. A discussion of possible reasons for this and a brief survey of the de facto pragmatic relations between state bureaucracy and fishermen indicate that there may not have been a complete change from one kind of state to another. Rather, different modes of state ideals and policies seem to coexist, and the distance between Öztürk’s claim and the fishermen’s traditions may correspond with a parallel distance between bureaucratic ideal and the pragmatics of fishery policies.

Turkish fisheries in the Black Sea and the Sea of Marmara are today among the largest fisheries in the Middle East. Istanbul and Trabzon on the eastern Black Sea coast constitute the two major centres of fishing in contemporary Turkey. Fishing has long been important in both Istanbul/Constantinople and in Trabzon. There is fairly rich source material concerning pre-republican fishing in Istanbul, but almost nothing about fishing in Trabzon during the same period. The noted traveller and writer Evliya Çelebi, among others, describes an especially rich fishing tradition in Constantinople. Since ancient times a variety of different fishing technologies has been known and used there and elsewhere in the empire. Certainly fishing in Constantinople had a special position in the empire and was considered throughout Europe to be very advanced. In 1723 The French Minister of the Marine commissioned twelve paintings of the Istanbul fishermen’s method of fishing as part of a programme to revive French fishing.

Evliya Çelebi also visited Trabzon, which he associates with fish and fishing to some extent. He limits his discussion of Trabzon’s fish primarily to the ‘hapsi’ (hamsi, anchovy). Of the fishermen we learn only that they are ranked lowest among the seven classes of people in Trabzon that Çelebi identifies. Although fishing in Trabzon probably shared much of the fishing
technology and terminology of Istanbul, it appears that fishing in these two places developed to some extent as distinct traditions. Several factors combine to allow consideration of fishing in Trabzon as a partly independent tradition, including a particular focus on hamsi (and the need for special technology, such as the roşı – fish scoop-net); a tradition of catching dolphins in the Black Sea region (a speciality of Sürmene); different ways of calculating the shares in the fisheries; and some region-specific fishery terminology that existed around the time of the First World War.11

Whilst hamsi fisheries supplied an important food for people in the Black Sea region, dolphin oil was more important as an export commodity. Fish oil (in other words, dolphin oil) is already mentioned in sixteenth century sources12 as well as in many later sources.13 In 1940 twelve teams each comprising 40–50 persons were engaged in the dolphin fishery in Sürmene. Although some fishermen went to catch dolphins in Russian waters before the First World War,14 the fishing activities in Trabzon and other Black Sea towns were for the most part very local. There was probably little direct contact between Trabzon and Istanbul fishermen. Trabzon fishermen may have interacted more with fishermen across the Black Sea. Older fishermen in Trabzon city told me that ‘in the times of oars our grandfathers went all the way to Navroş (Noworossijsk), to the Sea of Azov, to catch hamsi. They marketed the fish there and sold their nets to local fishermen.’ Moreover, there seems to have been little fishing outside of the urban centres in Ottoman times and during the early republic. Except for the hamsi catches, which reached the general populace, poor and rich, urban and rural, the Trabzon market must have been considerably smaller than the Istanbul market. In the eastern Black Sea region fishing as a livelihood and an adaptation to a monetary economy was probably limited to the city of Trabzon and a few other towns. Trabzon was not a great exporter of fish (at times the town imported fish). During Ottoman times the export of salt sturgeon and caviar from the northern shores of the Black Sea to Constantinople was much more important.15 Hamsiname, first published in 1928,16 is in its entirety dedicated to the hamsi, but as in other sources one finds little information concerning the social organization of fishing and how it was treated by the state, and rather more about the culinary and poetic elaborations of this popular fish.

Although Constantinople may have had a special position in Ottoman fisheries thanks to a large urban market and very favourable natural conditions, I believe that a survey of sources about fishing in Constantinople would reveal some general information concerning the Ottoman administration’s approach to fish and fisheries. In Constantinople fishing with the dalyan, a special ‘Turkish’ variant of fishing weir, was both an important and widespread technique. The dalyan is usually constructed by driving pieces of wood into the seabed to form a trap into which fish, in particular migratory
fish, swim. Sometimes the entire trap is constructed of wood; more often nets are stretched between poles. One or more men keep watch from a tower located beside the dalyan and as soon as a shoal has entered the weir signal to other crew to close the opening of the dalyan. In Istanbul the dalyans were set up every spring and autumn, with the opening directed southwards and northwards respectively to capture the fish that migrated through the strait.

Dalyans have been used in the Black Sea, Marmara and Aegean Seas for a long time.17 According to the Greek geographer Strabo, who lived 2000 years ago, there were excellent bonito dalyans in Sinop18 – indicating that dalyans-fishing is a tradition that stretches back to the pre-Ottoman and even pre-Byzantine era. This tradition has probably been limited to the eastern Mediterranean and the Black Sea region. In other maritime areas under some Ottoman influence there have been seemingly different and independent traditions of fishing. Although fishing weirs similar in technology to dalyans were found along the Arabic coast of the Persian Gulf, the name for the traps (hadrah) as well as fish names and fishing terminology in general19 show no resemblance to the ‘Levantine’ tradition of fishing.

Along the coast of what constitutes present day Turkey, the use of dalyans during the Ottoman era was especially important in Constantinople and in parts of the Sea of Marmara and the Aegean Sea. There are, however, few reports of dalyans in the Black Sea. There were several dalyans on the Black Sea coast near the mouth of the Bosphorus, probably close enough to supply Istanbul with fresh fish. At Sinop there were eight dalyans at the beginning of the twentieth century,20 and according to fishermen in Sinop there were three or four dalyans in operation there until the mid-1970s. There may have been small dalyans in operation at other places in the central and western Black Sea coast, but I have come across no reference to or mention of such weirs in Trabzon. However, further east, there were, and possibly still are, a few dalyans. One reason for the absence of dalyans in Trabzon may have been a lack of suitable sites for their use. The construction and operation of dalyans require shallow and fairly protected waters on a fish migration route, conditions hard to satisfy in Trabzon.

The right to use dalyans was granted by the sultan (or, if far from Constantinople, by local lords). By distributing such privileges, a strategy in no way restricted to fishing, the sultan secured both followers (those granted the leases) and income from taxes. Charles White21 gives an interesting description of one of the larger dalyans in the vicinity of Istanbul:

[The dalyan] at the small...island of Cromyon (onion) [on the Black Sea coast east of the mouth of the Bosphorus] is of considerable magnitude, and occupies one hundred and fifteen men, with twelve or more large boats. A third of the latter, with proportionate crews, are
employed in carrying fish to the market; the remainder are constantly engaged in working the nets. This fishery is rented by Achem Agha, a respectable Turk, from the grand marshal, Riza Pacha, who himself farms the fisheries on this coast from government. . . . The organization of Achmet Agha’s dallyan differs from those already described only in its magnitude, and in the peculiarities arising from the situation. As many as twenty thousand palamoud [bonito] and five hundred swordfish are frequently trapped in the course of twenty-four hours. . . . The expenses of this fishery are heavy. The agha stated that the profits barely sufficed to return him a fair interest of five per cent, after deducting rent, wages, and outgoings. 22

The operation of the fixed dalyans implied clear and sanctioned rules for gear use and access to a specified sea space. Seascapes that were suited for casting seines, primarily shallow waters close to shore, were called voli places. Dalyans were usually erected on places suitable for casting seines and the use of such mobile nets was likewise often restricted to a village or a person. As in the case of dalyans, the right to cast seines at volis was granted by the state/sultan. 23 Devedjian 24 made an extensive and detailed list of volis in his comprehensive work on fish and fisheries in Istanbul and the Sea of Marmara at the beginning of the twentieth century. He pays special attention to volis in the Bosporus and the Sea of Marmara, but also mentions some outside of this region, for example in Elegu (present-day Beşikdüzü – Eynesil) on the eastern Black Sea coast. A wide variety of rules applied to the some 500 volis that he lists. The use of ‘some’ is described simply as ‘Libre pour tous les pêcheurs/tout le monde’, ‘Réserve au propriétaire’, or reserved for inhabitants of a special village. However, for many others he notes more specific and detailed customary rules (‘Us et coutumes’). The customary rules for use of the Sténia voli in the Bosporus are described thus:

The fishing is reserved for seine boats from Sténia and their co-proprietors who live in Kanlidja and Indjir-keuy. It is exploited during winter and summer. Every boat from Sténia pays an annual rent to the proprietors [of the voli]. If the fishermen from Sténia or the boats of the proprietors are not present, the boats with seines or beach seines from other places may fish without paying any rent. Fishing by seine boats is decided by drawing lots. 25

Devedjian’s material is supported by other sources. According to Salamone, 26 who recounts the memories of Greek fishermen who left the Marmara Islands in the early 1920s, there was
a system of territoriality which strictly defined the areas of the Sea of Marmaras within the vicinity of the Marmara Islands which could be exploited by each village. The Sea of Marmara was treated, in other words, as a landed territory within the Ottoman feudal bureaucratic system. Each village received a franchise from the Turkish authorities delineating which ‘fishing spots’ (...) could be exploited. (...) [O]nly companies from that particular village could fish there.

He notes that ten ‘voles’ (volis) were allotted to the village of Galmi on the Marmara Islands and that the fishermen were not allowed to fish in other villages’ volis. Further, Devedjian27 writes of the customary right of possessors of volis to destroy any fishing equipment set on the voli. Thus, restrictions placed on access or use of gear were primarily intended to protect the rights of those entitled to exploit the resources rather than the resource itself. Nonetheless, there seems also to have been a general understanding that one should avoid catching undersized fish. In the Sea of Marmara the use of small meshed hamsi nets was officially permitted all year, but only as long as hamsi were to be seen28 (this must have been nearly impossible to police). Moreover, there were regulations that stipulated seasonal limits in certain fisheries. These were certainly marginal concerns in a fishery regime in which fish were perceived to be abundant and where taxing was a major state objective.

Thus, a very large proportion of the fishing activity in Turkey during the Ottoman era was highly regulated, with a wide variety of specific rules of access. The rules were to a large degree sanctioned by the state. A combination of the limited portability of much of the fishing gear and the state’s interest in distributing privileges and securing taxes, facilitated a high degree of ‘closure’29 in the fisheries, especially where levels of activity and profits were high.

Law, tax, war and providing the capital with food and other necessities were the main concerns of the Ottoman state. From the fifteenth century the Ottoman state depended on various forms of tax farming to fund the bureaucracy and the military as well as to supply the imperial family. Tax farming was a flexible administrative model widely used throughout the empire. All land belonged to the sultan; local lords usually did not receive hereditary rights to land. Although the state tried several times to introduce direct taxation (to be collected by salaried bureaucrats), more than 95 per cent of the revenues collected up to the end of the empire came by way of financial consortiums and local notables through tax farming.30

The state designed policies to ensure supplies of sugar, wheat and sheep for the general populace of the capital. Such policies were apparently not aimed
at fisheries (there is no account of such in Devedjian and other sources). There is good reason to believe that the Ottoman administration’s primary interest in fisheries was its potential for generating tax revenue and, to a lesser extent, providing seafood for the palace.31 Charles White writes:

All sea and river fisheries are fiscal monopolies; they are farmed annually to the best bidder in each sanjay (district), generally some wealthy pacha, by whom they are relet to various sub-tenants, under the supreme control of the balyk eminy (inspector of fisheries), who is responsible for the proceeds and police.32

Salamone writes of the privileged fishing spots around the Marmara Islands that ‘the Turkish government only farmed them out by imperial edict for the sake of taxation – and taxation on fishing catch was a steep 20 per cent’.

The administration and taxation of fisheries were probably more complex than described above, but it is difficult to make a detailed reconstruction with any confidence from the available sources. The state most likely secured income from the fisheries by taxing it in two ways.33 First, many dalyans and volis in the Bosporus were operated according to a tax farming arrangement whereby the renter paid an annual rent or commission (mukataa) in return for privileged usufruct.34 One such tax farming (iltizami) arrangement may have included the right not only to farm individual dalyan or voli, but all fishing within a certain coastal region. This tax farming system closely resembles the kind of tax farming applied in the much more important agricultural sector during (at least) the nineteenth century. However, rights to some dalyans, like the Beykoz dalyan, were given as a reward (ödül) to high-ranking military officials (Pasça) and remained in effect private property through inheritance.35

The second method of taxing the fisheries was a tax (ruşum) on sales in the fish market.36 Soon after occupying Istanbul, the Ottoman rulers established the Balık Emaneti/Balık Eminlîği (Fish ‘Trustee’ or Control). Its chief, the Balık Emin (Fish Chairman), was connected to the Başdefterdar (Ministry of Finance). The Balık Emaneti had the authority – in accordance with the law on trade – to supervise the taxation of all fish brought into Constantinople. Illegal fishing (and marketing) was regarded as a problem; it implied tax evasion and falling prices at the fish market. Such negative results for both the state (less tax) and the clients of the state who had been granted the right to exploit the fishing grounds were unacceptable.37

The primary interest the state had in the fisheries throughout the Ottoman era was clearly its potential as a source of tax revenue. This is evident from the following oral reminiscence of a refugee Greek who talks about the Marmara Islands at the beginning of the twentieth century. ‘We were a village of three hundred families (Galimi), and we had only one Turk among
us! The only Turks we saw in our village were the ones that the government sent — ‘bureaucrats’ — they called them memoudes  in Turkish, that is ‘government employees’. (…) ‘Whoever went fishing had to pay them the tax.’ However, it remains unclear whether the village had to pay both this sales tax and a tax for the franchise.

All in all, until the end of the Ottoman empire, a complex regime of ownership, locality-specific usufruct rights, and different kinds and rates of taxation were in operation. Rather than apply a universal tax regime, the Ottomans designed special rules for each province. Whilst one cannot easily generalize from Istanbul to the rest of the Ottoman empire, we know that during the sixteenth century the regime for the Trabzon livası (province) included a tax (tithe) on the catch of all kinds of fish as well as a transit tax on fish brought into the town of Trabzon to be transported elsewhere. During the sixteenth century, tax revenue from dalyans was entered as a separate category in the official registers of Sinop. In addition, fishing in the empire’s inland waters was often similarly regulated and taxed (miri, tax on state property, of 10–21.5 per cent). While the administration’s ambition may have been to tax all ‘commercial’ fishing within the empire, the state may have had little interest in stimulating change, or ‘development’, in the fisheries. A 1577 ferman (sultanic decree) orders that Muslim fishermen without a permit to use ıgırp should be forbidden to do so: ‘let them catch fish the way they have always been doing (kadimdenberi).’

Tanzimat reforms were already focused on education in the 1840s; agriculture and other sectors soon followed. During the latter half of the nineteenth century the state began to implement measures, such as supplying substantial credit, intended to develop the agricultural sector in keeping with ideas of economic progress (and not purely for taxation). A state bureaucracy for agricultural development was established and well-paid agricultural ‘controllers’ (Müfettişler) were appointed to serve in the provincial (Vilayet) centres. In 1888 the Agricultural Bank (Ziraat Bankası) was established to handle the credit afforded to farmers. The modernization project included investments in transport and educational infrastructure (even schools of agriculture (çiftlik) and milk production in Trabzon). Like most other regions of the empire, the eastern Black Sea region was also affected by these initiatives. As early as 1871 there were country credit unions (Memleket Sandıkları) in the district of Vakfıkebir and other rural areas in the region. In 1908 almost 30,000 people in the eastern Black Sea region had loans from the Agricultural Bank.

But did the state take steps to develop the fisheries? One of the official Trabzon Yearbooks from the end of the nineteenth century notes that ‘we must do like the Europeans and try to profit from the hamsi by putting four or
Although the idea of developing fisheries was clearly not alien to the Ottoman bureaucrats, in general this sector does not seem to have caught the attention of the reformers. Compared with reforms in military organization, education, law, science, or even agriculture, reform of fishery policies was a relative latecomer to the catalogue of reforms. After the middle of the nineteenth century the Ottoman state became increasingly indebted to foreign creditors, and by 1875 the empire was essentially bankrupt. In 1881 the Public Debt Administration (Düyûnu Umumye İdaresi) was established to manage many of the empire’s important sources of income, for the benefit of foreign creditors and was controlled by the major European powers. The first coherent legal arrangement for fisheries was codified early in the regime of the Public Debt Administration (1882). The new law concerned primarily taxation and the protection of usufruct rights to fishing grounds and was thus an ‘inscribed’ collection and record of existing formal and informal traditional practices.

In the early 1890s the Public Debt Administration brought in the fishery expert, de Bellesme, to undertake studies with the intention of developing the fisheries. However, the recommendations of this expert were not put into practice. Devedjian was one of the directors of the Istanbul Fish Hall, and his study was commissioned, ratified and first published in Ottoman by the Public Debt Administration in 1915. In his introduction to this first edition Devedjian articulates objectives beyond taxation when he writes that ‘if the Turkish fishermen had been enlightened about the progress that had been realized in other places, and if they had possessed modern equipment’, they would easily have caught fish that they were at that time unable to catch. This, he stresses, would have secured for the country (pays) a considerable amount of food, objects of trade and income every year. He laments the lack of fish processing industries that could satisfy the European taste (very expensive canned tuna was imported to Constantinople from Europe) and provide the country with important income.

The extensive mapping of current practices in Devedjian’s book, the fishery law, as well as the provincial yearbook for Trabzon, should probably be understood as attempts by the modernizing Ottoman state and semicolonial foreign powers to codify practices in order to develop and modernize them. The interest of the Public Debt Administration in fisheries did not differ markedly from that of the Ottoman administration. Although the (unrealized) strategy of the Public Debt Administration may have included intervention in the practice and structure of the fisheries, such intervention was probably done with a view to increase their own revenue. Fishery taxation was probably not very different from earlier arrangements, the main distinctions being that the Public Debt Administration, not the Ottoman state, was at the
end of the tax chain, and that they were possibly more effective in policing
the tax regime.

After the war of independence and the Lausanne treaty (1923) with the
European powers, the fisheries administration set up in Istanbul by the Public
Debt Administration was taken over by the young Turkish Republic’s Ministry
of Finance. \(^5^6\) The new Turkish leadership and administration showed an
impressive determination to intensify reforms across Turkish society. But was
there a new policy concerning the fisheries? Little information is published
concerning developments in the fisheries from the establishment of the
republic up to 1950. However, it is fairly clear that the new administration, at
an ideal level at least, had an approach to the fisheries different from that of
their Ottoman predecessors. An Austrian envoy to Turkey, the Ritter von Kral,
who seems to have worked as an adviser of sorts to the Turkish government
during the early 1930s, surveyed and evaluated the government’s efforts in
many sectors of Turkish society, among them the fisheries:

A legal regulation of the Turkish fisheries is planned, which requires
detailed preliminary studies. In the meantime provisional measures
have been taken to mitigate old evils; for example, abolition of the
fishing-tax which had long been felt as an imposition, reduction of
duties on tackle and accessories, promotion of sales by increasing the
manufacture of canned fish and the consumption in military barracks,
public services, schools, etc. In the meantime a decree was drafted to
reorganize the entire fisheries law. It contains modern regulations as to
admission to the fishery trade, the manner of practising it, the close-
season, the prohibition of the use of explosives, working conditions,
union questions, etc. The material conditions of the fishermen are to be
improved by the elimination of middlemen, by a revision of their
relations to the lessees and wholesale traders and by the foundation of a
Fishery Bank. \(^5^7\)

Von Kral goes on to note that discussions were held in Ankara between
government representatives and parties interested in fisheries, and concludes
that ‘[i]t will thus be seen that the Turkish fishery trade, which procures work
and livelihood for many thousands of men and is of the greatest significance
for the nutrition of the people, is well on the way to being modernized’. \(^5^8\)

One can conclude that the new administration’s ambitions and plans for
fisheries implied a radical break with the existing fishery regime. These ideals
were probably greatly influenced by the radical ‘statism’ ideals of the
nationalist–communist \textit{Kadro} (‘cadre’) movement that led the ideological–
political debate during the early 1930s. Yet, partly because of the indecisive and inconsistent approach of the bureaucracy, most of these lofty plans were never implemented. After a period of growth in the fisheries during the latter half of the nineteenth century, there seems to have been a general decline during the early republic. The state’s neglect of fishery policy reforms during the early years of the republic grew, most likely, from economic stagnation coupled with efforts to establish independent industrial production in more important sectors. There was, in effect, little change. Not even the commercial potential of the dolphin fishery in Sürmene was acknowledged by the state. Rather than abolish the fish trade tax in the 1930s, as had been suggested by the Ritter von Kral, the state more likely only reduced it. In 1928 the tax on fish sales was 11 per cent in Trabzon. In the years around the establishment of the republic some fish sales taxes were even increased.

We can blame the lack of effective state policies for the stagnation in the fisheries from 1920 to 1950. However, the pervasive assertion is that the stagnation can be ascribed to the departure of the Greek population. In her study of The Fisherman’s Problem in the Marmara Sea, Leyla Taner, who relies primarily on Günlük, claims that ‘[a]fter the Independence War...the demographic changes, exchange of Greek and Turkish population between Greece and Turkey have swept away the fishing sector’. Were the Greeks so dominant in the fisheries that the large-scale population exchanges between Turkey and Greece in the early 1920s had dramatic consequences for the continuity and potential development of the fisheries? Had fishing traditions (in Istanbul) been circumscribed by ‘ethnic’ organization?

In public perception as well as in historical sources, the association between fish and Greeks keeps popping up. The alleged dominance of Greeks (or Rum as they were and are known to the Turks and others) raises the question of the continuity and fixity of fishing practices and associated social arrangements. Many claim, even contemporary Turkish fishermen themselves, that the Turks learned the art of fishing from the Greeks. It seems to have been a common conception among European travellers and commentators from the turn of the nineteenth century that fishing and seafaring was yet another occupation that the ‘Turks’ didn’t have a liking for or competence in. In contemporary writings by both Turks and Greeks the views of the Europeans are reiterated. Some evidence suggests that many Rum from fishermen communities in the Bosphorus and in the Marmara and Aegean regions left during and after the war and were replaced by Muslims under the population exchange. This is known to have happened, for instance, in the important fishing village of Rumelifener at the northern opening to the Bosphorus, as well as on the Marmara Islands. As Greeks left Rumelifener, their houses were given to Turks coming from Greece. These newcomers soon moved out, however, to be followed by Black Sea Turks, primarily from Rize.
I believe it would be far too simplistic to regard the fishing sector as purely ‘Greek’ before and during the Ottoman era, to be succeeded by ‘Turks’ only after the revolution and population exchanges. Muslims were clearly fishing long before the Greeks left. There is evidence of Muslim fishermen in Trabzon at an early date.\(^{69}\) Although the degree of separation along lines of religious–ethnic background within the fishing sector appears to have varied over time and from place to place, fisheries have probably been the business of a mixed population during the Ottoman centuries. Undoubtedly, the Turks can be said to have learned fishing from the Greeks. The contemporary language of fishing contains to this day a fundament of Greek. But this applies to the entire eastern Mediterranean and Northern Africa as well as the Black Sea region\(^ {70}\) and can be postulated only as a very general claim. Fish terminology, and especially fishing terminology – such as that presented in Devedjian’s book – was, and still is, a mixture of Greek and Turkish.

All in all, it is difficult to get a clear picture of the Ottoman fishing population, even in Constantinople.\(^ {71}\) There may have been considerable continuous flux and change throughout the centuries.\(^ {72}\) Furthermore, the Greek presence in Istanbul fishing continued for some decades after the revolution and population exchanges since the Greek population of Istanbul was left out of the population exchange (\(\text{mu} \overline{\text{badele}}\)) with Greece in the 1920s. In 1934 the total Greek population (both Turkish and Greek citizens) was still as high as 100,000, making up approximately one tenth of the population of Istanbul.\(^ {73}\) This number remained stable until the mid-1950s.\(^ {74}\)

That Greeks living along the Bosphorus were forced to leave while those in Istanbul were allowed to stay probably resulted in the departure of Greek fishermen with large seine (\(\text{girgir}\)) boats (primarily living in the upper Bosphorus). On the other hand, Greek fishermen who were involved in smaller-scale fishing (in the city of Istanbul) remained and intermingled with Turkish fishermen.\(^ {75}\) In the Black Sea region, however, the Greek presence came to a more abrupt end with ethnic conflict and expulsion of the Christian populations in the years before the War for Independence. By that time Muslims in the Black Sea region were probably already deeply involved in fisheries and seafaring. The French scientist Theophile Deyrolle,\(^ {76}\) in discussing the various ethnic groups in Trabzon in 1869, claimed that a large number of the Trabzon Turks were traders and fishermen.\(^ {77}\) The Black Sea Turks’ competence in fishing is also attested to by the fact that it was primarily Black Sea Muslims who took over the fishing activities of the Greek fishermen in the upper Bosphorus. Muslims from the environs of Rize, in particular, fleeing from the Russian occupying forces in 1916,\(^ {78}\) settled in Rumelifener and Poyraz, both close to the northern end of the Bosphorus.

Thus, I cannot agree with Taner’s assertion that the fishing sector in Turkey was swept away with the population exchanges after the War of
Independence. Although the republican revolution and the population exchanges temporarily reduced the population of experienced fishermen and brought about a restructuring of the fisheries, there is insufficient evidence to suggest that it amounted to a complete break with the past. Quite the contrary. The purse-seine technique (gırıg) was first developed by fishermen in the Greek–Armenian community in Kumkapı (in Istanbul) around 1885. Yet, the knowledge of the gırıg clearly survived the War of Independence since it soon afterwards came to be the preferred gear among fishermen in Istanbul and the Black Sea.

Instead of regarding fishing and seafaring as something inherent to the ‘Greek people’, it may be wiser to consider the multicultural Istanbul and Marmara region as the centre of seafaring, fishing, and seafood cultures of the eastern Mediterranean region. The decline or lack of development in the fisheries prior to 1950 might as well be ascribed to a general stagnation in the population and the economy of Istanbul as to the emigration of the Greek fishing communities. The loss of its status as the centre of government to Ankara and a general economic decline meant that people left Istanbul. The upper classes were shrinking and Istanbul was becoming ‘poor and provincial’. There might simply not have been a market to allow for any substantial expansion in the fisheries during this period. In his book Boğaziçi Konuşuyor (The Bosporus Talks) Câbir Vada does not attribute the lack of development in the fisheries to the emigration of the Greeks. Although he laments the stagnation (durğunluk) in the Istanbul fisheries, he writes that it had been like that for at least 60 years. The year 1950 may, therefore, be regarded as a more important watershed in the history of the Turkish fisheries than the population exchanges in the early 1920s.

After the Second World War important changes took place in the political and economic situation of Turkey. There was increasing international and domestic pressure for democratization and multi-party politics, which meant that parties started to compete for votes. The main contender for power, the Democrat Party (Demokrat Parti), argued for a more liberal economic policy. At the same time, Turkey came within the scope of the Marshall Plan. Between the Wars the government, aiming at self-sufficiency and economic independence, had given highest priority to the development of heavy industry and the construction of a network of railways. In 1947 the government, still in the hands of the ‘ Atatürkist’ Republican People’s Party (CHP, Cumhuriyet Halk Partisi), drew up a new development plan that emphasized free enterprise, the development of agriculture and agriculture-based industry, and the construction of roads. With United States aid, important new roads were built – for example the Samsun–Trabzon road –
and large investments were made in the agricultural sector, with tractors as the chief instrument and symbol.82

The new development priorities with their emphasis on agriculture also encompassed fishing, when in 1947 the Ministry of the Economy saw the economic potential of this sector. Social policies, on the other hand, did not change appreciably; unions remained illegal. Contrary to the Kadro ideals of eliminating the middleman, no serious attempt was made to check the power of the fish kabzımal (wholesale trade commission agents) over the fishermen. A number of other initiatives to develop the fisheries, however, quickly followed one upon the other.83 In 1950 the Ministry of Trade organized a congress on ‘water produce’. In the same year, probably in an effort to win votes a month before the parliamentary election, the state tax on fish catches was removed.84

The responsibility for fisheries changed hands many times, and was at times very dispersed. In 1950 the Ministry of Finance handed over responsibility to the Ministry of Agriculture (Toprak Mahsileri Umum Müdürlüğü) which in 1952 transferred it to the newly founded autonomous Meat and Fish Foundation (Et ve Balık Kurumu, EBK). A few years later the EBK commanded a fleet of no fewer than 21 boats for various purposes (fishing, research and so on) as well as cold storage facilities in approximately 20 urban centres. The EBK established several fish processing plants, among which was a fish oil and meal factory in Trabzon (1952) that initially processed mostly dolphin oil.85 Boats and factories were partly financed by foreign aid. The authorities commissioned reports from a range of foreign (western and Japanese) consultants during the 1950s.86

In 1955 the first fisheries statistics were collected and from 1967 were produced annually on the basis of questionnaires.87 The state also started to build several new large protected harbours along the exposed Black Sea coast. One author contends that the first fishery cooperatives were established in 1942 as part of an effort to increase food production during the wartime years,88 while others maintain that the first cooperative was established in Istanbul in 1949.89 In any case, this development was intensified around 1950 when the Marshall Plan promised fishermen monetary and technical aid if they organized into cooperatives. Fishery cooperatives were immediately established and fishermen acquired some credit through them. Credit for investments in fishing technology was made available from 1953/54 onward from the ‘General Directorate for Agricultural Credit’ along the same basic lines as for agriculture. Yet, the flood of initiatives during the early 1950s soon lost its impetus. After 1952, responsibility for fisheries development, including the cooperatives, was turned over to the EBK where the primary emphasis was on technical developments. Thus, the young cooperatives received less attention and most of them disbanded or fell into the hands of the kabzımals.90 Towards the end of the 1960s the EBK initiative to develop
the fisheries was dissolved. Despite various state-led initiatives during the 1950s and 1960s to develop the fisheries, fish catches did not increase.

Some years later, fisheries were included in the five year plans, which were drawn up from 1963 onwards, with entire volumes devoted to ‘Water Produce’ in the VI plan\textsuperscript{91} and VIII plan\textsuperscript{92} in 1989 and 2001, respectively. In 1968 bureaucrats in Ankara made a new effort to stimulate the formation of ‘water produce cooperatives’.\textsuperscript{93} In 1971 the old fisheries law (\textit{Zabıta-i Saydiye Nizamnamesi}) from 1879–82 was finally replaced by new ‘water produce’ legislation.\textsuperscript{94} At the same time the responsibility for ‘water produce’ (as the fisheries were hereafter called) was transferred from the Ministry of Trade (Ticaret Bakanlığı) to a newly established General Directorate for Water Produce (Su Ürünleri Genel Müdürlüğü) within the Ministry for Agriculture (see Figure 1 for organizational structure of the Turkish bureaucracy). This General Directorate established branches in all provinces. The ministry started to draw up and distribute annually a set of regulations for the ‘harvesting (‘hunt’) of water produce in the sea and internal waters for commercial purposes’ (Denizlerde ve İçsularda Ticari Amaçlı Su Ürünleri Açıklıklını…Sirküler). Since 1976 credit and grants have been distributed from a ‘water produce’ branch (Suürünleri Kredilendirme Müdürlüğü) within the Agricultural Bank.

Prior to 1950 there were a few initiatives directed towards a scientific ‘treatment’ of the sea, fish and fisheries, but these were either stimulated by foreign powers and institutions\textsuperscript{95} or soon faltered, as in the case of the small Institute of Marine Biology at Baltalimanı (Istanbul).\textsuperscript{96} There was the interesting initiative of the Village Institutes (Köy Enstitüsü). These were 21 institutes established from 1940 onwards with the intention of improving contact between the village people and the banner-bearers of the new republic – the future teachers. The programme at the institute in coastal Beşikdüzü in the province of Trabzon, included theoretical and especially practical training in fisheries and brought teachers, students and fishermen together.\textsuperscript{97} This institute, like others of its kind, was closed down towards the end of the 1940s after allegations by the Democrat Party that they were centres of communist propaganda.\textsuperscript{98}

Development in Turkish water produce science has been intimately intertwined with state initiatives in the fishery sector. The trajectory of contemporary Turkish marine, or rather ‘water produce’, research originates with the Hydrobiology Research Institute (Hidrobioloji Araştırma Enstitüsü) at Istanbul University. The Institute was established in 1951 under the leadership of the German, Professor Kosswig, who (in all probability) had fled the Nazi regime in 1937. EBK partly financed the Institute. However, the Hydrobiology Institute was partly incapacitated when the EBK withdrew its support. EBK started its own research activities in 1955 and the publication series \textit{Balık ve Balıkçılık} (‘Fish and Fisheries’), partly in collaboration with
the Institute. Before 1980, in addition to the Institute at Istanbul University, there were small water produce units at Ankara University and the Aegean University. Various smaller ‘water produce’ research units also started within the Ministries. The activities of these various research bodies were pooled and strengthened in 1984 with the establishment of State Water Produce Research Centres (Devlet Su Ürünleri Araştırma Enstitüsü). During the 1980s many more Water Produce Colleges (Su Ürünleri Yüksek Okulu) were established within major universities. Most of these have since evolved into faculties (fakülte) or departments (bölüm) which provide degrees at both M.Sc. and Ph.D. levels. In 1999 water produce/marine sciences research in Turkey consisted of three state institutes and 17 departments or sections at universities. At these university departments and faculties alone around 500 academicians were employed in 1999. Moreover, several university biology departments are currently involved in marine research.
In the republican era the state’s approach to fisheries had become framed within a new discourse, a framing that was indicated in Devedjian’s work but only reached its ‘mature’ form after 1950. This discourse was, and is, constructed of topics and concerns such as ‘proteins’, ‘food’ (gıda), (human) ‘population’, ‘production’ (üretim), ‘water produce’, aquaculture, ‘progress’ (kalkınma), technological development, and the exemplar of Europe and Japan. This discourse has been critically important and pervasive throughout fisheries science and management in Turkey. For instance, there seems to be almost a template for the introduction to Turkish fishery texts. I will limit myself to two examples. An example of adherence to this template is the table of contents of the first substantive chapter in a textbook on ‘Fishing and Catch Technology’:

II. THE STATE OF WATER PRODUCE IN THE WORLD AND IN TURKEY
1. The general state of water produce in the world
2. The state of water produce in Turkey
3. A comparison between our country and countries which are developed with regard to water produce
4. The importance of water produce from a nutritional perspective
5. The water produce policies in Turkey
6. The catch modes (şekilleri) for water produce

A second example is an extract from the opening speech made by the head of the Foundation for Economic Research (İktisadi Araştırmalar Vakfı) at a panel discussion organized in 1988 on the topic of hamsi fisheries in the Black Sea. The speech was made at a point when the hamsi fisheries had seen their longest sustained increases in catch:

Actually, fishing is one of the undeveloped (gelişmemiş) activity sectors of the Turkish economy. Its share of the GNP does not even reach half a per cent. The annual catch of fish does not even amount to 600,000 tonnes. Per capita production is 10–11 kilos whereas consumption [only] totals 8–9 kilos. In countries like Norway and Japan where fisheries are developed, the per capita production and consumption amount to 6–7 times these figures.

These two examples illustrate several characteristics of the Turkish modernizing approach. First, the western scientific–technological approach came to be seen as a guiding star at the expense of an appreciation of contemporary ‘traditional’ technology and organization. Fisheries were seen
as an undeveloped (gelismemis) and primitive (ilkel) sector to be transformed – in terms of technology, organization, profile of consumption – in the image of a modern, western prototype, and, notably, not a Russian/Soviet prototype. In the 1930s the Soviet Union developed a modern fishing fleet in the Azov Sea and the Black Sea, organized as state-directed collectives (kolkhoz), which regularly caught far more fish than the Turkish fleet. Yet, despite their ‘production’ success, they were discredited, like all Soviet models after 1950, because they were ‘communist’.

Secondly, developing the fisheries was and, to a certain extent, is still considered by many within the state bureaucracy, to be a national mission or duty:

In conclusion one may say that – as one may also understand from the historic development to the present – it is a national task and necessity to put into operation as rational, scientific and economic a management as possible in the administration of this issue and in finding solutions to the problems that the fisherman, the producer and the industrialist face in their use of the products of our seas and ‘internal waters’ – these waters that shall become our future food depot.

Third, the concepts ‘produce’ (urun) and ‘production’ (uretim) are central to gaining an understanding of the bureaucratic approach to the fisheries. Fisheries emerged, or were created, as a sector to be mapped, manipulated, calculated and researched; a sector contributing to the ‘economy’ of the national state, not to the tax revenue of a ‘backward’ state. The whole apparatus of ‘modern’ and ‘rational’ economic measurements and policies was mobilized to work on what now emerged as a ‘sector’.

Fourth, the concern about ‘produce’ also reveals that the approach to fisheries is ‘agriculturist’. This is reflected in the disproportionate stress on aquaculture and ‘internal waters’ (rivers, lakes and so forth). Most bureaucrats working on fishery issues are trained as agricultural engineers. This is a type of training that has long been important and widespread in Turkey. Most of the first generation ‘water produce’ (or marine) scientists also received their degrees in agriculture, or possibly aquaculture. The agriculturist approach is also reflected in the terms ‘water produce’ (su urunleri) and ‘production’ (uretim) which the bureaucracy almost uniformly prefers to use rather than ‘fish’ (balik), ‘catch’ (av) and similar terms. Indeed, the ‘water produce’ bureaucracy is dispersed as lower level units (departments and sections) within the Ministry of Agriculture and Rural Affairs. In place of writing about ‘catches’, the fishery statistics list ‘production’ (uretim) of the different kinds of marine and fresh water animals (though this is rendered as ‘catch’ in the English translation). Moreover, in
water produce research there is relatively significant focus on and resources allocated to fish farming. Whilst there are three (small) ‘water produce’ Research Institutes, there are almost 60 state Research Institutes conducting research on agriculture or husbandry. The Tea Research Institute in Rize opened in 1924, long before tea had become an important cash crop, whilst the Water Produce Research Institute in Trabzon was not established before 1987.

Fifth, the attention to ‘produce’ and ‘production’ in state policy is bound up with a concern about the diet of citizens or subjects. Many policy documents and academic texts refer explicitly to protein deficiency in the diet when arguing for the development of the Turkish fisheries. The republican bureaucracy had gradually become concerned with the nutritional composition of people’s diet. This was already evident in the days of Atatürk when, for example, he emphasized the importance of sugar production so that ‘healthy children will not be a utopian ideal’. This was a new way to ‘treat’ food, framed by a new discourse of scientific rationalization, once more modelled on western templates. The state developed a nutrition policy that included nutritional education especially directed towards children since ‘most of our people are not knowledgeable about nutrition’.

Together these five aspects seem to articulate a version of what James Scott has termed ‘high modernism’, a ‘strong version of belief in scientific and technical progress’. Ideals of high modernism have been articulated in many modernizing states and have sometimes been authoritatively implemented by totalitarian states. Although not acknowledged by Scott, in Turkey, especially during the statism years and in the Kemalist ideology, we find an archetypical instance of high modernist ideals.

The focus on a national mission of stimulating the economy, raising production, and providing the population with proteins is indicative of, and was made possible by, a general shift in what the elite classes saw as the role of the state in society: agents of a radical restructuring of society. In contrast to the classical Ottoman state elite, the new republican elite envisioned complete societal restructuring as the path to arrive at some ideal modern Turkish nation-state. It had become the responsibility of the state not only to show concern about people’s ‘way of living’, but also to authoritatively guide this. The state became increasingly concerned about its subjects’ welfare, lifestyles and capacities. In order to reach the new goals, the people, especially the villagers, had to be guided and educated in line with rational scientific knowledge.

Unacknowledged by Scott, Foucault has presented an historical analysis of the transformation from a rule of ‘sovereignty’ to ‘governmentality’ in Europe during the sixteenth to eighteenth centuries. ‘What characterizes the
end of sovereignty’, he writes, ‘is in sum nothing other than submission to sovereignty’. On the other hand, what characterizes governmentality is that ‘...the finality of government resides in the thing it manages...[T]he instruments of government, instead of being laws, now come to be a range of multiform tactics’.115 In employing these tactics on the level of economy, the family becomes an instrument rather than a model, and statistics the tool when considering the population at large:

...[P]opulation comes to appear above all else as the ultimate end of government. ...[I]t has as its purpose not the act of government itself, but the welfare of the population, the improvement of its condition, the increase of its wealth, longevity, health, etc. (...) The new science called political economy...is accompanied by the formation of a type of intervention characteristic of government, namely intervention in the field of economy and population.116

This analytical model has primarily been used to address the historical development of European states. Mitchell has argued, however, that many of the more radical tactics of governmentality were actually first implemented in the colonies, and in a similar vein, Mintz117 regards the old colonial world as a ‘laboratory of modernity’. Yet, the distinction between a state based on sovereignty and one concerned with governmentality has also been fruitfully employed to analyse the changes within the Ottoman and Turkish states. In an essay on modernity, religion and the Ottoman/republican state, Nalbatanoğlu118 notes that, contrary to the classical Ottoman ‘art of statecraft’ regime, ‘population’ was a calculable ‘standing reserve’ within a new ‘science of politics’ in the young Turkish Republic. But, there was no sudden change from sovereignty to governmentality with the establishment of the republic. A change towards governmentality had been under way since the early nineteenth century. The first effort to quantify population came with the 1830 census. In the era of the Tanzimat reforms (1839–71) the central government assumed responsibility for education, health, and sanitation, all of which had previously been in the hands of the religious institutions (foundations) and local communities. Thus, inspired by European models as well by the success of Mehmet Ali’s reforms in Egypt, the Ottoman state began to change its focus from territory to human resources and developed new powers to affect the day-to-day life of people. In this process the sultans and the governments paid a great deal of attention to the ‘power’ of statistics as a means of obtaining information about the population.119

In general, ‘governmentality’ started earlier in the Ottoman empire than in many other ‘non-European’ areas of the world. Note, however, that this change towards governmentality took place well before the development of
Turkish nationalism and the idea of ‘one (Turkish) people’. The idea of ‘governing a population’ came chronologically before the idea of ‘legitimacy based upon representing a people’ (in other words, nationalism). Nonetheless the instruments that the late Ottoman state developed to influence the population, especially education and statistics, became important tools in the nationalist project of the Young Turks and Kemalists. When these instruments were combined with the development of indigenous social sciences from the end of the nineteenth century, a far more penetrating process of social engineering became possible. It was not just that science was seen as the best guide in improving technology; policy itself was being ‘scientificized’. Social science played a prominent role in the reform process and legitimated a macro perspective on society and ideas of social change that focused on plans and projects, not on any ‘inherent’ dynamism of development. The new republican state elite went much further than those of the late Ottoman empire in envisioning a ‘new’ society, an ideal nation, and new kinds of men and women to populate it. The elite went so far as to design policies that were directed at reshaping the subjects’ selves. In one sense it is possible to say that the new regime was more populist; on the other hand, it was also quite paternalistic (or Jacobin).

What about fisheries? The first attempts at ‘governing’ them beyond taxation were taken by the semi-colonial structure of the Public Debt Administration, first by non-implemented recommendations of the foreign expert de Bellesme in the 1890s. Somewhat later, the meticulous work by Devedjian exemplifies the general tendency of trying to map, register and quantify ‘what there is’, not only for taxation purposes, but in order to be able to stimulate economic development. However, in Devedjian’s work there is still no explicit concern about fisheries as an important provider of nutrition/proteins, although he shows a great interest in the culinary value of fish and other sea produce. The culinary issue later disappears completely from the official treatment of ‘water produce’.

In the statism years up to 1950, high modernity ideals concerning state penetration into the fisheries developed, but were not implemented. When the state finally started to implement fishery policies from 1950, and especially from the latter 1960s, it did so to a large extent in accordance with the new idealistic plans and aims designed for the fisheries and at great financial cost. Rather than securing income through taxes, the new fisheries policies (especially from the 1950s onwards) became a drain on the state’s economy through subsidized credit, grants, investments in infrastructure (harbours, cold storage halls), research and bureaucracy. The new Sea Products Law stipulates that the total level of taxation on fish sales may not exceed 3 per cent and is only to be collected by the municipalities. The priorities of this new policy comes out ‘crisp and clear’ in the latest report from the State
Planning Organization where it is stated that ‘...in order to raise a healthy
generation...the water produce tax rates should be decreased so that the
consumers can buy water produce more easily...’.  

Most of the instruments, or tactics, employed to work on the fisheries have
already been mentioned. They include statistics, the model exemplar
organized by the state (the EBK initiative), establishment of cooperatives,
education of the fishermen, establishment of a fishery bureaucracy, extension
of credits and grants, codification of laws and regulations, design of short-
and long-term plans, arrangement of symposiums and conferences, stimula-
tion of water produce science, and investments in physical infrastructure. All
of this is new. Before 1950 these were imaginable and desirable, but were yet
to be put into operation. With the growth of the ‘water produce’ sciences, for
the first time the position from which Professor Öztürk speaks became
possible.

Of these new tactics, science has attained an instrumental position. Ideally,
the other tactics follow the lead of the sciences. At a large conference
concerning the Black Sea a marine scientist addressed the audience:

As everyone knows, the Black Sea is now exhausted (yorgunmaktadır)
by a range of problems. How can we find answers, solutions, to these
problems? Who is going to give the answers? Those who know
(tanmak) the Black Sea very well, the scientists of the Black Sea
countries, will provide the answers.  

Note that in the fields of sea, fish, and fisheries Turkish sciences started to
develop and grow only when the state launched its initiative for developing
fisheries. The sciences were part and parcel of this mission, and there seems
to have been little independent academic drive towards the development of
marine sciences. During the 1950s the institutional linkages between the
semi-autonomous EBK and the scientific communities were evidence of and
speak to the role of science as an agent for development. However, although
the ‘water produce’ research and education sector has since become fairly
large and the university sector is formally independent of the executive
branches of the bureaucracy, the position of ‘scientist’ (bilim adamı/insanı) is
seldom considered an independent and purely academic position. For most
scientists and certainly for the ‘man in the street’ (or at sea) in Turkey, a
scientist is first and foremost a state employee, a görevli, working on tasks
assigned by the state. Of course there is some individual variation as to how
scientists themselves perceive their role and their relation to the state, but the
idea of the scientist as a state representative, a spearhead in the national
civilizing project, is indeed widespread. Thus, there is often little difference
between scientists and state bureaucrats, the former are simply seen as one
kind of state bureaucrat (*devlet memuru*). The frequent movement of persons between positions in the ministries, the state research institutes and the university departments reinforces this impression. Thus, Öztürk does not talk from the position of independent intellectual, but as a state representative, or as a moralistic representative of the Turkish modernization project.

High modernist ideals have been influential in many modernizing states. But their influence varies by the degree to which the ideals have been transformed into plans and programmes and implemented as practical policy. Furthermore, as it is Scott’s main concern to demonstrate, many of these high modernist ideals, when transformed into grand state projects, have not been successful. Foucault concedes that the tactics employed in a state-guided disciplinary society, exemplified by the change from punishment to reform as methods of social control, did not have the intended effect; the tactics did not work on the subjects, not as intended anyway. This has clearly been the case of many larger reform projects in the Turkish Republic, for instance the attempt to ‘redress’ the people. The effort to work on people’s bodies and tastes, gender and family relations, by banning the veil and prohibiting ‘religious’ dress for university students and public employees has been met by widespread resistance. It has even been one of the rhetorical vectors that recently brought some of those that articulate this resistance into government office.

When it comes to the state schemes for reform of the economy, there has been less public controversy even though some of these programmes penetrate deep into local social organization. The Turkish state has implemented many far-reaching reforms in the agricultural sector and established a high degree of control or influence over the production and distribution of many kinds of produce. While agriculture was the main tax base for the Ottoman state, the state schemes in agriculture have made it one of the main burdens of the Turkish Treasury. The production of important crops such as sugar, tea and tobacco has been administratively controlled through state-owned enterprises, and 16 Agricultural Sales Cooperative Unions, formally apex organizations of farmers cooperatives but effectively controlled by the government, have a strong influence over the organization of production. They also have control over the procurement of the produce at prices fixed annually by the government.

One day in 1991 the old small-boat fisherman Muzaffer Çulha told me about fishing in bygone days. We were sitting on the sand among the small fishing boats and looking across the harbour at the large fishing boats and the factory of the Çarşibaşı cooperative. I asked him whether he had been a member of the cooperative. ‘No, that’s not my business
(işim olmaz)’ he replied, ‘the cooperative is only for the owners of the large boats (mal sahibleri, proprietors)’, and added, ‘They call it the ‘water produce’ cooperative. We used to say fish!’

In practice the state has not intervened to the same degree in the social organization of the fishing sector, except for its attempt to establish cooperatives. A national union of fishery cooperatives, however, has not been established formally, because the fishermen could not match the legal requirement for the seven regional associations of cooperatives. The water produce cooperatives have mainly been instruments for distributing credits and have had only very minor roles in organizing production and distribution.129 Whilst state personnel at district level generally includes one or more agricultural engineers, none – not even among the Çarşamba District authorities – have responsibility for ‘water produce’. Furthermore, the state’s ability to initiate concerted, integrated and planned action has been hampered by an increasing degree of institutional branching, both of the bureaucratic units within the ministries and of the research sector.130 The General Directorate for Water Produce was dissolved in 1984 and its tasks distributed to several other units within the Ministry of Agriculture.131 The various departments and sections within the Ministry of Agriculture and Rural Affairs do not share a common perspective or policy on fisheries. In addition, still other units are responsible for tasks such as planning and grants (State Planning Organization), licences (Under Secretary for Maritime Affairs), registration of boats (Harbour Chiefs), and credit (The State Agricultural Bank).132 The lack of cooperation between these institutions echoes the situation elsewhere in the state bureaucracy (or may be more pronounced in the case of fisheries). Even the activities and policies of the institutions responsible for state administered sugar production, for example, can at times be disparate and competitive. Lack of good personal relations in the Treasury hinders coordinated policy, to the extent that different units tend to compete and thus withhold data and information that could be useful for other sections – unless one has got a friend in that other unit.133

Thus, the structure and activities at institutional level fail to mirror the conceptual framing of the fisheries as one sector of the national economy. This lack of institutional integration, especially the lack of a ministry or general directorate for fishing, is seen by many as the main reason for various problems in the fisheries. However, this perception is based on different premises: fishermen complain about the lack of a powerful and just state that can implement and police laws, while the bureaucrats lament the lack of the panoptic view, the all-seeing integrating gaze.

There may be several other reasons that the state has provided less ‘guidance’ to fishing than to most other ‘sectors’ that the state bureaucracy
has identified. First, production and distribution of fish was only penetrated at a late date, much later than most agricultural commodities that early on came under direct (state-owned enterprises) or indirect (but de facto through agricultural sales cooperative unions) state control. When the state eventually undertook to stimulate progress in the fisheries, the political climate was no longer conducive to heavy-handed state intervention. The political climate during the Democrat Party era of the 1950s, as well as the post 1980 neoliberal climate, probably did not favour any ‘communistic’ development in the fishery sector. Secondly, since Turkey imported almost no seafood (or meat, for that matter), fisheries were accorded little national importance within the import substitution strategy that was pursued up to 1980. Nor was ‘water produce’ perceived as important export produce.

Trouble in managing fish and fishermen is a likely third reason for the feeble state penetration into the fisheries. Mobile boats and men are not easy to govern, control, police or count. Also, since fish and other seafood are ‘produced’ daily most of the year and spoil rapidly, they are much more difficult to store, control, manage and standardize than most agricultural products. This is especially so in Turkey where there is a clear consumer preference for fresh fish and dislike of both frozen and canned fish. The trade required competence, knowledge and networks that the state bureaucracy simply did not possess and was hard put to gain control of. Despite early aspirations to dispense with the ‘capitalist class of middlemen’ and establish a direct collaboration between the producers and the state – as well as similar ideas proposed by the political elite in the 1960s – the state seems to have made only half-hearted attempts to gain control of the trade. The abortive water produce undertaking of the EBK was probably intended as a step in this direction. In general the fish hall facilities have improved and fish trade has developed in scale and volume. But, to my knowledge, there is no tendency toward monopolization, state or other. Nor are there any kinds of price control or price regulation of the fish trade. There seems to have been no basic change in the structure of the fish trade in recent times. The basic outlines of the auction system in the fish halls with auction middlemen (madrabaz) and kabzimal display a great deal of continuity from Ottoman times.

Although state penetration into the fisheries has been feeble, fisheries nevertheless finally ‘took off’. From the mid-1970s the statistics started to show the figures desired by the bureaucrats. While the total catch of ‘water produce’ had fluctuated between 50,000 and 150,000 tonnes during the period 1955–75, catches rose to almost 700,000 tonnes in 1988. The rapidly increasing catch capacity of more mobile fishing, especially big boat purse seiners and to a lesser degree trawlers, accounted for most of this increase whilst the dalyan fisheries were all but wiped out by changing environmental conditions and competition for space and fish. Whereas the basic operation
of the purse seiners did not change, new and improved technology made fishing much more effective. The big purse seiners as well as the more middle range trawlers on the Turkish Black Sea coast are mostly owner-operated and tend to ply coastal waters. Technological development and an enlarged scale of operation have, particularly since 1990, led to an increased concentration of ownership: fewer boats take more of the catch. Parallel with this, a heterogeneous and economically important small boat sector also developed rapidly both in scale and technological level.

Several reasons can be cited for the success during the 1970s and 1980s. Many fishermen were entitled to generous water produce credits, and the credits effectively reached the ‘producers’. The state policy of building harbours and providing grants for the establishment of fish meal factories also helped stimulate growth in the fisheries. Yet, factors outside the ‘fish production sector’ were of equal importance. A general monetization of the economy from the 1950s onwards greatly increased the demand for seafood. The construction of a national road network significantly improved market access and gradually transformed many regional seafood markets into one large national market.

The state did not guide developments within the fisheries sector in every detail. It was certainly instrumental in creating opportunities, but most of the actual developments and dynamics were unanticipated and remained partly illegible for bureaucrats and scientists. Actually, while officials of the state have some knowledge of boats and equipment, expressed especially in the annual fishery statistics, they are, at the formal level at least, ignorant of the social processes in fishing. The state effort of registration and research has not addressed this. There is no Turkish social science of fishing. I contend, however, that without these invisible processes, the fisheries would not have experienced its success during the 1970s and 1980s and their resilience during the resource crisis years of the early 1990s. The unseen social processes in fishing include the traditional, but dynamically changing knowledge and dexterity of the fishermen, a social organization based on family enterprises that is flexible, resilient and has its ‘natural’ authority structure, and a willingness on the part of entrepreneurial rural small farmers to take risk.

The success of many small family fishing firms that typically started in the 1960s and 1970s as small boat fishermen lies in their ability to manoeuvre within the state-imposed framework. Here, a pragmatics of state–fishermen relations is at work, as when powerful fishermen and factory owners lobbied successfully in 1991 to reduce the legal minimum size of the hamsi when catches and income were reduced by a severe resource crisis. The same pragmatics has been at work in an ingenious circumvention of official bans on construction of new fishing boats after 1994, or in the successful pressure
levied on the ministry to postpone or cancel payment of outstanding loans after seasons with below average catches. In such cases, a hierarchy of local and regional ‘big men’, interacting according to codes of conduct and along informal network structures that only partly parallel the official framework of cooperatives and the like, comes into play. While fishermen have had little influence on the design of the development ideology, they certainly contribute to shape state fishery policy. Chris Hann has noted similar processes in the development of tea production in Rize where ‘officials aspired to control every aspect of the business’ but where the rural population ‘domesticated the state’ by multiple strategies that affected the authorities’ policies.137

In the autumn of 1990 the ministry, answering to the dramatic resource crisis, decided to enforce existing regulations concerning the legal minimum size of *hamsi* (9 cm.). In protest against this decision, owners of big fishing boats and some fishmeal factories went as a group, formally defined by the cooperative structure, to meet bureaucrats and politicians in Ankara. In the deliberations the fishermen prevailed. An influential owner both of purse seiners and a fish meal factory was widely identified – even in the press – as the initiator of this mobilization. He was chairman of the local cooperative at the time, but privately said: ‘The cooperative is not important, I go as a firm (*Kooperatif önemli değil, şirket olarak gidiyorum*)’. Most fishermen pay lip service to cooperative organization so as to satisfy zealous bureaucrats keen on the proper development of the fisheries. In many cases this formal interface for interaction with the state is appropriated by a few influential men leaving many fishermen to feel alienated by the new world of ‘water produce’.

This is a level of action that state representatives must actively involve in, but often regret the existence of, criticising the prevalence of ‘personal’ relations, ‘corruption’, ‘brokers’ (*torpil*) and so forth. State strategies for development become difficult to pursue when local initiatives can circumvent plans, laws and regulations. In this pragmatics of state policy, however, concerns other than the development schemes and reforms are of critical importance. For individual MPs, political parties or the government, extension of credit is a means of attracting followers and political support. Likewise, the establishment of a new ‘water produce’ faculty is often an outcome of concerted action by local businessmen and the province MP, rather than the result of a planned strategy for the development of water produce science. Harbours have often been constructed as the result of successful lobbying by ‘big men’ and MPs who want to favour their men and their district. Thus, there is a clear difference between ideological justification (for example GNP, nutrients) and pragmatic justification for individual state initiatives and decisions concerning the fisheries. Pragmatic
justification primarily relates to the need for keeping and acquiring followers – both regional ‘big men’ and voters. Thus, at a pragmatic level certain groups within the state are guided to a great extent by their need to sustain support for themselves and the government.

Bureaucrats and scientists share an ambivalent attitude towards developments in the fisheries. To a certain extent they regard fishery policy as a success in terms of increased levels of ‘production’. In their view the fishermen, however, remain ignorant. Fishermen do not comply with laws and regulations. Moreover, the cooperatives do not work because fishermen depend on ‘personal relations’. The fishermen quarrel and compete and therefore remain in the clutches of the middlemen. The fishermen are not able to ‘add value’ to their catch – they do not process and market the fish in ‘modern’ ways. In these respects, then, the fisheries are not a success story. As one senior bureaucrat expressed informally to his fellow water produce bureaucrats and me: ‘we did not manage to educate the fishermen’. Yes, there has been dialogue, communication and interaction between fishermen and managers. However, this is a pragmatics divorced from the ideals of fisheries development. ‘Governmentality’ may be the ideal, but the term ‘popular sovereignty’ perhaps better describes the activities of particularly those who depend on the new political mechanisms of party politics and representative government for their position and influence. The break with Ottoman sovereignty may therefore not be as decisive as the rigidity of Foucault’s model suggests. The different modes coexist and the state is not homogenous. As Michael Meeker has argued, continuities from Ottoman times may be found in the play of interpersonal relations, both locally and vis-à-vis state representatives, according to a ‘discipline of interpersonal relations’.

In the new fisheries regime, what position has been given to the pre-republican system of privileged access to, and even possession of, voli and dalyans? Laws and regulations provide a mixed picture. Dalyans and volis, as technology, are there in the new law. The 1971 Water Produce Law stipulates that privately owned dalyans left unused for five years will be nationalized (kamulaştırılma). Furthermore, lease of ‘production’ (istihsal) rights to dalyans, volis, lakes and lagoons is primarily to be given to water produce cooperatives or village associations of men residing in the production region (paragraph 4). This suggests that the state regarded as unacceptable the inheritance and possession of private dalyans and other kinds of privilege associated with the old fishery regime. Even the latest annual circulars, specifying the various regulations that pertain to water production, include detailed rules concerning the use of a limited number of dalyans and lagoons. Privileged access to such fishing territories is acknowledged, but
the law stipulates changes in the ownership and usufruct regime. A policy to ‘develop’ dalyan fishing, however, was never formulated. These ‘traditional’ modes of fishing were clearly perceived as ‘marginal’, as they surely were by 1971. Although still an option under the law, rental of production rights of dalyan, voli sites, and the like have seemingly been contingent upon the state. Recently the practice of dalyan and voli fishing became even more restricted when the ministry decided not to grant any new permits. The bureaucrats discourage their use because they allegedly catch fish in the reproduction season. They indicate, however, that the practice of dalyan and voli fishing conflicts with other more important uses of sea space.

While territorial rights connected to ‘traditional’ technologies were marginalized in the new law, what of such modes of fishing in practice? In 1955 the ‘folk poet’ Vasıf Hıç wrote the following about the volis in Istanbul around 1950:

Along the Anatolian and European coast of our city there are voli places, rented from the Evkaf [government office of foundations] or in the past offered someone as a favour by decree, where the renters or owners possess the right to execute the art [of fishing]; other boats cannot come from the ‘open’ and turn a voli there. . .’

Thus, while the dalyan fisheries were in decline, and the more mobile purse seine fishing (gırıır) gained ground, old practices continued in the beach seining (manyatçılık) on the volis. Hıç noted that ‘beach seining means fishing in one’s own place’, and ‘each voli has its own borders for where the seine can be set’. There were ‘owners’ that were entitled to charge others for the use of their voli. If Hıç is correct, during the early republic the privileged patrons (tax farmers) of the fishing rights disappeared and the fishermen rented fishing grounds directly from the government controlled Evkaf. On the other hand, some Ottoman privileges were possibly retained well into the republic. The large Beykoz dalyan on the Bosphorus was rented out by the heirs of a certain Hüseyin Ağa who had received the right to the dalyan as a gift from the sultan during the Ottoman age. The heirs retained this right until it was set up for the last time in the late 1970s. Republican policy had clearly not effected a decisive break with the past. There were continuities from Ottoman times at the level of fishing practice and even state-acknowledged privileged access. An explicit conflict between received practice and new ideology, however, does not seem to have emerged. Clearly, technological development as well as the destruction of good voli and dalyan sites along the Bosporus made this a less sensitive question than it could otherwise have been.

In effect, more mobile fishing technologies gradually outstripped the kind of fishing for which the state acknowledged privileged access. Concurrently,
taxing the fisheries became less important for the state. Because fisheries came so late on the development agenda, there was a legal void that, except for some seasonal and regional limitations, gave almost free rein to the growing fleet of purse seines and trawlers. Furthermore, the attention of state bureaucrats was directed at the perceived main challenges of stimulating technological development and increased production. There is no indication that the state made any effort to preserve the system of privileged access, individual or communal, to fishing spots. In all likelihood, the dalyans, and especially the voli places, were not policed as stringently before. Fishermen probably increasingly enjoyed ‘hereditary’ rights to voli places without the burden of paying a rent or tax for using them. Although the regulations include a long list of regional and place prohibitions, none of these are related to privileged access for individual persons, villages or the like. Since it was likely also in the interest of the skippers and owners of the big fishing boats to support a concept of ‘open access’ to seascape and fish, the idea of the sea as an unrestricted commons was gradually consolidated. That fishing was increasingly seen as ‘free’ (serbest) may also be connected, especially after 1950, to the anti-communist rhetoric of ‘freedom’. When asked about restrictions on access, some fishermen forcefully express such views, saying that ‘we are not like Russia (in other words, the Soviet Union), we are free’.

When I started my ethnographic fieldwork on the eastern Black Sea coast of Turkey in 1990 the fishermen characteristically presented their visions of the sea as free in initial conversations. Typically on a first visit to a fishermen’s kahve (teahouse), I found that several men would gather around me and some outspoken skippers would take it upon themselves to reply to my questions. In their replies they categorically denied that small-boat fishermen apply informal regulations. ‘Here’, they would say, ‘the sea is free for all.’ However, participation in small boat fishing in the district of Çarsıbaşı told me something else; in certain kinds of small boat fishing there were informal principles at work of limited and privileged access based on a uniform consensus within communities of practitioners. In the seasonal fisheries for red mullet each boat/team would use bottom trammel-nets and set them in the same position regularly for a month or more. If a fisherman continued to set his net at the same site for several days, that site would be regarded as his position. Fishermen spoke about these positions as ‘owned’ (sahibli) and nets positioned inappropriately were described as ‘forbidden’ (yasak). When all available space was marked off, there was no place for newcomers. According to the fishermen in my field site this system operated all along the eastern Black Sea coast. However, it was not codified in text, neither centrally nor locally, and no authority organized it. Indeed, the informal character made the scope of such restrictions on access relatively limited and fragile.
Fikret Berkes has described similar systems of restricted access in small-boat fishing along Turkey’s Aegean and Mediterranean coasts. He describes a case of a lagoon fishery at Çamlık near Adana where a cooperative of local resident fishermen rents the lagoon and protects members’ rights by patrolling the boundaries of its fishing grounds. In Alanya small boat fishermen hold an informal meeting at the teahouse to draw lots to decide the rotation by which fishermen are going to use named and numbered fishing spots during the seasonal fishery for bonito. The decision and its implementation are given legitimacy in Alanya by the local cooperative although not nearly all fishermen are members, and copies of the seasonal agreement are deposited with the local authorities. Such cases are difficult to find along the Black Sea coast. For instance, the user-group formation in Çarşibaşı is not connected to any formal organization at all. The small-boat fishermen’s marginal position in the local communities makes this difficult. The cases discussed by Berkes are unique in that they are uniformly small-boat fishing communities and that their fishing territory is not attractive to trawlers or purse seiners.

I have no comprehensive knowledge of the extent and kind of informal fisheries management along the Black Sea coast of Turkey. The very nature of the regulations – informal, manifest only in practice, lack of objectification – usually means that only those who participate get to know the inner workings of such regulations. On the other hand, I have also realized that once I could speak from experience, from practice, I have been able to engage fishermen in conversations – although only in very informal contexts – about comparable forms or principles. Local fishermen have told me that informal rules govern user-rights in fishing for tirsi off Çarşamba, in beach seining near Arsin (20 km. east of Trabzon, see Figure 2), and bottom-net fishing for turbot in many places. Beach seining (barabat, manyat), now of little general importance in the region, may be more subject to notions of territoriality. Villages or teams might possibly have laid claim to territories (stretches of coastline) and not crossed boundaries into other regions, expressed in saying such as: ‘We mostly worked this area, and we never crossed the river.’ Few fishermen are willing or able to talk about privileged access in the hamsi fisheries of former times. One very old fisherman in Trabzon did tell me that it used to be common to close places (yer kapardılar) a month before the hamsi arrived. Until the middle of the 1980s, small-boat fishermen in Yalıköy (Kılıda), a few kilometres west of Çarşibaşı, that specialize in whiting fisheries, used to go as far east as Hopa in pursuit of this fish. But, when the locals started to chase them off, especially by cutting their nets, the small group from Yalıköy left. For some time they also fought with the more numerous Eynesil fishermen for access to the rich whiting grounds off Eynesil. Eynesil is much closer to...
Yalıköy than Hopa is, and after some time they came to an understanding that granted the Yalıköy fishermen access. Recent years have seen an increasing degree of conflict over sea-snail dredging. While fishermen in 1991 could range freely along the coast in pursuit of rich sea-snail grounds, communities have striven increasingly since then to restrict sea-snail dredging in their ‘home’ waters. Sea-snail fishermen from Çarşıbaşı and Yalıköy have been driven away from Hopa and other places. Towards the end of the 1990s fishermen from Çarşıbaşı decided that it was ‘comfortable’ (rahat) to dredge for sea-snails only between Trabzon and Görele, even avoiding some areas within this region. In the homogenous small boat fishing community of Gerze (Sinop Province) small-boat fishermen chase trawlers from their home waters. Fishermen in the small-boat fishing communities Eynsil and Faroz (within the city of Trabzon) both less well equipped for sea-snail dredging and opposed to it because they believe it to be harmful. They enforce informal restrictions on fishermen from their own communities and try, partly in cooperation with state supervising bodies, to keep strangers out of their waters.

At first sight the fishermen’s knowledge and practices may not seem to amount to a ‘tradition’ since there is no traditional governing authority and the system has not ‘existed for a long time’. Nor do fishermen talk about fishing practices and knowledge as ‘tradition’ (for instance as gelenek, örf) or as something ‘received from our ancestors’. Here tradition is on the level of knowledge/know-how as it is employed, involved, or enacted and reproduced in practice, and not on the level of form, which is an emergent pattern. The pattern of regulations in the seasonal fisheries for red mullet gradually disappeared during the 1990s while a similar pattern emerged in the seasonal fishery for the new species ‘Russian’ mullet (Mugil soiuy). Yet, the change in form conceals continuity in basic knowledge that is all part of a tradition of knowledge and of a tradition for the appropriate conduct of fishermen.
Since the use of dalyans and other fixed gear was not widespread in the Black Sea region, there has not been a tradition of officially sanctioned fixed legal status for user rights to fishing locations.\textsuperscript{148} There may have been \textit{de facto} and informal ‘ownership’ of good net locations in hamsi fishing, but these ‘possessions’ have for the most part disappeared with changes in technology. At an informal level, often not spelled out as rules but only existing as \textit{de facto} habits, there clearly exists a dynamic tradition for restricting access in small-boat fishing. However, the \textit{de facto} open access regime in the economically and culturally dominant purse seine and trawl fisheries is, at the ideal level of a hegemonic discourse, elevated to a general rule for all fisheries. The ‘sea is free for all’ conceptualization of access is probably strongest in the Black Sea section of the Turkish fisheries.

International academic and management discourse concerning fisheries management is currently split. One line of thought emphasizes indigenous or traditional ecological knowledge, co-management, participation and so forth. The other, and the more influential in large-scale fisheries, is on bio-economic models that focus on stock assessments, total allowable catch (TAC) and quotas. One might envision the first model as useful in the Turkish fisheries. The traditional framework of privileged fishing rights, rented from the state and still partly in place when the Turkish state undertook to develop the fisheries from the 1950s onwards, could have formed a basis for the development of communal usufruct rights in modern coastal fishing. In modernizing Japan, for instance, the state has incorporated some of the traditional local culture of fishery management and privileged community-level access into the national framework of fishery management.\textsuperscript{149} Ruddle describes codification and formalization of the territorial rights of ‘fishing villages’ during the early Tokugawa (or Edo) period (1603–1867) with the \textit{umi-ho-giri} law (sea division law) of 1719.\textsuperscript{150} Although the Japanese and Ottoman regimes differ in that the Japanese enacted a law for sea territories much earlier, the two states seem to have had similar interests in fisheries. As in the Ottoman state, the aim of the Edo policy was to satisfy followers and secure monetary income (corvee labour and tribute from fishing to feudal chiefs) for the government through tax or rent collected from villages or individuals. Thus, from a government perspective, both the Ottoman and the Edo, the main motive for regulating territorial fishing rights was to secure political stability and monetary income. When it comes, however, to the era of modernization (in Japan from the Meiji restoration 1868–1948) the approach of the states to fishing traditions diverges. Ruddle writes:
According to the Fisheries Law (1949) fisheries right in the sea area under the jurisdiction of a Fisheries Cooperative Association (FCA) are the bona fide personal property of the individual members of that association, to whom they are distributed by the Association. Each FCA establishes regulations for the control and operation of various types of fishery in an equitable, efficient and sustainable manner, as local conditions dictate. This situation has its origins in the Japanese feudal era, (...) The beneficial aspects of traditional village institutions were not abandoned during the modernization of Japan. (...) Thus the organization and administration of modern Japanese coastal fisheries owes much to the continuance of an entity developed during feudal times. (...) Present day regulations pertaining to entry rights and fishing grounds remain essentially the same as those of the Edo Period. 

In contrast to this, the Turkish Republic has, at an ideal level at least, chosen to try to completely reframe or recreate the fisheries. Implied in many Turkish scientists’ and bureaucrats’ discourse of development is a denial of local culture, seen for example in their disregard of the notion of imece (collective, communal work) as a possible ideological foundation for cooperatives. The relevance of ‘traditional’ practices, even of practice per se has been ignored within the official framework. Practices of local regulation and privileged access, which were not only acknowledged by the Ottoman state but an integral part of the tax system, have been increasingly muted or suppressed.

There did, and do, exist terms for traditional practices and institutions in Turkey, such as adet, örf (or urf, customary law) aneane/gelenek/görenek (tradition), that could have been developed along the same lines as, for example, adat in Indonesia to give recognition and legitimacy to local practice and law. Serjeant, in his ethnography and survey of coastal societies in the Persian Gulf and the southern coast of the Arabian peninsular, relates how fishing in places such as Bahrain and Kuwait was subject to ‘highly complicated and sophisticated customary laws’ sanctioned by the local shaikh or the state. In many cases fishing rights were codified as ‘property’ and registered by official deeds and documents. These customary rights are often codified as shar, which is not related to Sharia, but rather means adah (custom).

No such concept of custom, however, fell within the new, idealistic scheme of a national mission of western style development and enforced social and cultural change in republican Turkey: tradition and custom were contrary to rationality, reason, logic and science. When bureaucrats and scientists recently started to consider devolving managerial fishery rights to local-level
fisherman’s villages or organizations, they used the concept oto kontrol (auto control). Thus, their approach frames the issue of fisher participation within a ‘western’ scientific discourse of fishery management instead of elaborating the pre-republican tradition and/or incorporating contemporary local practices.

A Turkish professor comments on development and tradition:

Societies (toplumlar) are in a state of change. Customs (örfler), on the other hand, do not change. For this reason, a society (cemiyet) bonded to customs does not change. Customs are regional. In the Turkish Republic there are absolutely no customs. Customs and mores (örf, adetler) are also incompatible with the Atatürk revolution. Because the Atatürk revolution is rationalistic (akılıcı). Customs and mores do not rest upon reason (akıl), but on unconsciously held faith (nakil).

The Japanese modernization process took place at a time when the empire expanded. Traditional Japanese culture was, therefore, not perceived as an obstacle to, but as an integral part of, successful modernization. In contrast to this the Ottoman, Young Turk and republican Turkish efforts at modernization took place against a background of imperial decline and, ultimately, collapse. Successive formulations of Ottoman and Turkish modernization ideology increasingly came to discredit tradition and the Turkish Republic was created on the premises of change, a forced change towards an idealistic, western model. In this framework, local custom, as well as Islam, was perceived as being reactionary. Science has become an instrument in a moral ideological discourse of development and a stronghold against tradition and Islam. Only when the western model itself provides ‘openings’ for the local, as within the ideal of cooperative organization or the concept of ‘auto-control’, does the official framework give scope for an interest in the local, the particular. But, as the history of Turkish fishery cooperatives demonstrates, the social engineers of the Turkish Republic were, unlike their Japanese colleagues, unable or unwilling to base these cooperatives on local customary culture and institutions. In 1969 a Trabzon MP wrote that:

To rescue our fisheries from the lack of guardians and organization, an offensive for fundamental change is necessary. Our position is as follows: the co-operativization as foreseen in our Constitution should proceed quickly. Fishermen should be saved from the hands of exploiters and capitalists (sermayedar). . . . The fisherman should get used to managing, organizing and making forward leaps himself. This is the solution.
From this and other texts, one gets the impression that ideally the cooperatives should organize every and all activities in the ‘fishery sector’. An adult education textbook on cooperative activities includes a short section on ‘water produce’ cooperatives. Three photographs of fishing activities (pulling a seine, fishers’ activities in a harbour, and auction of landed fish at a large fish hall) are all accompanied by the text: ‘The activities of water produce cooperatives (Su ürünleri kooperatiflerinin faaliyetleri)’. No fisherman would perceive these as activities of cooperatives!

In a study of systems of law and practices of conflict resolution, June Starr speculates about the possible reasons for the non-codified status of customary law in Turkey. She argues that in Africa, and we may add Indonesia, it was the experience with colonial rule that stimulated the codification of ‘local law’. ‘Because Turkey was never colonized, local actors never had to manoeuvre to safeguard their leadership positions, and no localized “law-ways” developed as a preserve of local leaders that paralleled the preserve of African colonial leaders, namely customary law.’ Whilst this assertion may be somewhat simplistic with regard to Turkey, the ‘colonial experience’ may explain why ‘customary law’ was to a larger extent acknowledged and codified in places other than Turkey. In western discourse, ‘custom’ and custom law’ has largely been the ‘other’ of modernization and ‘progress’ and only operationalized as tools of colonial rule, or – more recently – as indigenous knowledge and law on marginal groups in the west (typically ‘first nation’ or indigenes, or where aid organizations focus their attention (particularly Africa and parts of Asia). Kemalists were, and are, ardent moderns and have rejected tradition and custom in toto.

Rather than drawing on models that emphasize tradition, continuity and participation, fisheries management in Turkey now seems set to be designed according to ‘modern’ bio-economic models. Marine sciences in Turkey have over the last 15 years shifted from ‘production’ towards bio-economic models that focus on calculations of stocks, sustainable yield, and fishing effort. The new emphasis has been stimulated by the perceived resource crisis and a closer interaction with international science and has been facilitated by an increased (electronic) capacity for processing information. Although scientists now rely more on bio-economic models than ‘production’ models to understand the dynamics of ecology and fishing, the overall framework of rational exploitation and the important role of the sciences remain intact. The new models advocated by the scientists may even afford them a greater role in the fisheries than before. The bio-economic models presuppose that more of the social and natural resources are legible (stocks, fleet structure) and require and legitimize deeper penetration of the state into the social organization of the fisheries. The bio-economic approach promises to make manageable that which has hitherto been beyond the reach of the state.
The conception of fisheries being ‘free for all’ is not a ‘pristine’ or ‘natural condition’ among ‘ignorant’ and ‘atomistic’ fishermen. Development in the fisheries created powerful actors within the sector that preferred an ‘open access’ regime. The state co-created this regime, partly through ignorance of traditions of restriction on access, partly through deliberate policy. I contend that Öztürk is unable to see the dynamic tradition of ‘protecting fishing grounds and controlling fishing areas’ because the elite in Turkey has been conditioned to ignore local, customary culture. They have ignored it for so long that there are almost no inscriptions of it in the official republican ‘catalogues’ or ‘registers’ of fishing. For the state it has not even been on the horizon.

A sustained ‘futurism’, including a period of high modernism, guided the Turkish development experience. Those who have been inspired by the futurism have aimed to restructure radically Turkish society and people. Although fisheries were perceived by the elite to be of minor importance in the Turkish modernization process, ambitious ideals for reform and development were formulated. Yet, when the state finally undertook to implement reforms in the fisheries from 1950 onwards, changes in the political climate together with the nature of the resource prevented the deep penetration into the production and distribution process that was to some extent achieved in some sectors of agricultural production. In the anti-communist conditions of the post-war years the Turkish State was not willing to implement their development ideals by authoritatively forcing a transformation of productive organization, for instance by forcing a change from family and community based production to ‘collectives’.

The continued prevalence of family-based production in the fisheries facilitated the growth and resilience of the fisheries. By the mid-1980s fishery policies were a partial success in terms of ‘production’. Technologically Turkish fisheries have come to resemble more closely the western ideal. But, in terms of process and structure the state policy was, by its own modernizing standards, a failure; the state did not take sufficient command of the sector and the fishermen did not behave as presupposed by the development plans. Networking and ‘personal relations’ remain the main modes of interaction both within the fisheries and between fishermen and the authorities. Save for the unsuccessful cooperatives there are no representative organizations through which fishermen can forward their interests. Moreover, there are no mass media such as newspapers or professional journals that specifically give voice to fishermen. Although ideals and plans have been designed with little local input, ‘locals’ are highly involved in the everyday pragmatics of negotiating state fishery policy.

There is nothing new in state schemes failing to meet their ends. What is significant is the wide distance between the ideals – the high modernity
models – and the pragmatics of fishery politics. The resilience of these ideals is probably sustained by the social distance between the water produce bureaucracy and the fishermen. The bureaucrats’ and scientists’ insistence on the ideals is probably also an expression of their powerlessness in face of the reality of pragmatic politics where powerful fishermen and factory owners can override bureaucratic ideals.

There is a limit to what the state can, and should, know about natural resources and local society. It is simply impossible to engineer in every detail micro social and natural processes. I claim, accordingly, that Professor Öztürk’s mistake is not that he is ignorant about local practices and traditions. There will always be informal social processes, often vital for the survival and sustainability of communities and natural resources, beyond the state’s gaze. But to make empirical false statements about local practices based on simplified and ideologically informed conceptions of fishermen and ‘people’ in general is objectionable. This approach provides evidence that the elite’s ignorance of practice and the adherence to futurism is still influential in contemporary Turkey. Öztürk’s statement is representative of a common characterization of fishermen as ignorant and prone to act irresponsibly. This discourse intends to divert attention away from the state’s role and the actual workings of its policies and places the responsibility for problems in the fisheries solely on the fishermen themselves. In effect, both the idealistic ‘production’ models of fishery development, and the new, again western inspired, bio-economic models fail to account for the social organization and power structure in the fishery sector and the fishing communities.

NOTES
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2. I have followed developments in these fisheries since 1990 and conducted approximately one and a half years of ethnographic fieldwork among fishermen and, to a lesser extent, marine scientists. During these years I have followed closely events in one particular fieldwork site, the small town Çarşıbaşı near the city of Trabzon in the eastern Black Sea region. For the historical narrative I draw upon a range of sources, most of it in the original Turkish, ranging from Ministerial reports, laws and marine science textbooks to travel accounts and encyclopaedic entries.
3. Although I survey some of the historical developments within fisheries during the Ottoman empire and in republican Turkey, I do not attempt an exhaustive historical description of either these fisheries nor the state fishery policies. Rather, this historical perspective is drawn upon to inform discussion of some major developments at the interface between fishing and the state, enabling me to discuss why ‘customary’ practices of restriction on access are almost totally ignored by state representatives in contemporary Turkey.


16. İhsan, *Hamsiname*.


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21. C. White, *Three Years in Constantinople; or Domestic Manners of the Turks in 1844*. Vol.1. (London: Henry Colburn, 1845). Charles White was in Istanbul for three years in the early 1840s as a correspondent for the Daily Telegraph; he mastered Ottoman Turkish and overall had a more intimate knowledge of various parts of Ottoman society than most other visitors and travellers of the time. The three volume work by Charles White is arguably ‘the best and most complete account of the manners and customs of the various inhabitants of the Turkish capital’. Mansel, *Constantinople*, p.276.


24. Devedjian, *Pêche*, pp.411–34. His very detailed work, which comprises more than 600 pages in the French edition and includes many drawings, figures, maps and tables, as well as current laws, was the first study of fish and fisheries in İstanbul/the Ottoman empire. Because the study was published only in Ottoman Turkish (old script) and French, it is unfortunately not easily accessible to today’s scholars. A translation into modern Turkish would be most welcome!

25. Ibid. p.413. Kanlica and Incirköy are two villages a short distance from each other on the shore opposite Stenia on the Bosporus. It is not clear from Devedjian’s text whether these rules were inscribed (as text) or not.


28. Ibid., p.50. Use of the small meshed *hamsi* nets was not accepted for other species since it would catch undersize and immature fish.


32. White, *Three Years*, p.90.

33. Somçağ, ‘Balıkçılık’.


37. Koçu, *İstanbul: ‘Balık Emaneti’*, p.2011, cites a 1577 *ferman* (sultanic decree) that gives the impression that this sales tax was also farmed out, but the source is not detailed or clear enough to come to any definite conclusions.

38. In modern Turkish, *memur*.


40. Devedjian distinguished, for instance, between *volis* with privileged access by village(s) and private *volis*. Furthermore, there were three types of privately operated *volis*: 1)
commissioned volis where 6–10% of the gross income was paid to the proprietor, 2) rented volis where a set price was paid, and 3) private volis where only the proprietor had access.

41. Gökbilgin, ‘XVI. Yüzyıl başlarında.
43. Devedjian, Péche, Appendix E.
47. Trabzon Vilayeti Salnamesi Vol.17.
48. İhsan, Hamsiname, p.16.
50. The annual taxes from the fisheries ranged from 22,635 to 87,803 Ottoman Lira in the period 1882–1914, making up 1–2.5% of total revenues of the Administration. H. Kazgan, ‘Düyun-ı Umumiye’, in Cumuriyet Döneminde Türkiye Ansiklopedisi (İstanbul: İletişim Yayınları, 1983), pp.691–716. In order to check illegal (i.e. non-taxed) fishing they set up their own office at the fish hall. Koçu, İstanbul: ‘Balık Emaneti’, p.2011.
51. A law regulating the export of mussels and oysters was already in effect in 1867. M.S. Çelikkale, E. Düzgünüş, and I. Okumuş, Türkiye Su Ürünleri Sektörü, Potansiyeli, Mevcut Durumu, Sorunları ve Çözüm Önerileri (İstanbul: İstanbul Ticaret Odası, 1999), İstanbul Ticaret Odası Yayınları, No.1999–2 , p.289.
54. Reprinted in French edition 1926:VI.
55. Once the Public Debt Administration had laid hands on the profitable fish taxes, the privileges enjoyed by the tax farmers may have come to an end, as was apparently the case in many sector. McCarty, The Ottoman Turks, p.310. Instead of the annual commission (mukataa) paid by more or less hereditary tax farmers, the administration initiated a system whereby fishing rights were auctioned for a period of three years. According to Devedjian, Péche, p.389, the tax and share regime for one kind of dalyan, the şıra dalyans in İstanbul, was approximately as follows:

**Gross revenue**

Less: 
- sales tax (resmi-miri 20–24%)
- commission (6–10%) to the patron of the voli (area) where the dalyan stood (alternatively, rent)
- cost of food for the crew (kumanya)
- commission to the fish trader (kabzumal)
- cost of transport to the fish market

=Net revenue

of which 75% to proprietor of dalyan
25% in shares to approximately 20 crew and woodworkers

However, the patent had the right to 2 shares.

That a commission was still paid to the owner of the voli may indicate that privileges were not entirely abolished. The same individuals may have retained the right to ‘farm’ the volis and dalyans.


Ibid.

M.A. Karaömeroğlu, ‘The Village Institute Experience in Turkey’, British Journal of Middle Eastern Studies, Vol.25, No.1 (1998), pp.57–73. In 1934 a ‘Sea Products and Catch Directorate’ was established in the Ministry of Economy, but as no progress was made in the sector, the responsibility was transferred to the Ministry of Transport and later to the Ministry of Finance (since this ministry dealt with the renting of fishing grounds). Acara et al. (2001), (note 6) pp.117–18. The Ottoman fishery law of 1882 was, with small adjustments in 1926, still in force. A new law, the Kabotaj Law concerning the Turkish coasts and water bodies, stipulated that only Turkish citizens had the right to fish in Turkish waters. Çelikkale et al., Türkiye Su Ürünleri Sektörü, p.289.

The number of dalyans in operation in the Bosphorus declined from 38 in 1875 to 27 in 1915. Also the large dalyan at the island of Cromyon, described by White, Three Years, was abandoned in this period. Devedjian, Peche, pp.396–403.

A local industry in dolphin oil processing developed between the wars (a cooperative venture involving local and German businessmen). Implicit in the development of dolphin oil was listed as one of the main exports from Trabzon in 1930. C. Odabaşıoğlu, Trabzon 1869–1933 yilları yaşantsı (Ankara: İlk-San Matbaası Ltd. Şti., not dated), p.127. Despite its economic importance and potential, dolphin fishing was not affected by state initiatives before 1950. Then the state encouraged the use of shotguns in dolphin hunting in order to develop a passive defence force in face of the new powerful communist enemy to the north. H. Karaer, ‘Kaybolan Yunuslar’, in I.G. Kayaoğlu et al. (eds.), Trabzon Kültür-Sanat Yılığı (Istanbul: Trabzonlular Kültür ve Yardımlama Derneği, 1989).

İhsan. Hamсинаме.

Devedjian, Pêche, pp.441,445.


In his detailed and ‘new Hellenistic’ travel account, W.J. Hamilton simply notes that ‘...along the [Black] sea-coast the Greeks are still, as they have ever been, the only fishermen’. W.J. Hamilton, Researches in Asia Minor, Potus and Armenia. With some Account of their Antiquities and Geology (Hildesheim: Georg Olms Verlag, 1984 [1840]), p.284. Aflalo, in his analysis of Turkey, declares that ‘[t]he fisheries are at present in the hands of Greeks, Lazes and Armenians, with the Turks in the minority’. F.G. Aflalo, Regilding the Crescent (London: Martin Secker, 1911), p.193. This observation echoes the common European preoccupation of that time to differentiate ‘national’ groupings. In such a context the category Laz remains ambiguous since it can refer both to a small, linguistically distinct population east of Rize and to the population along the eastern Black Sea coast in general. See M. Meeker, ‘The Black Sea Turks: Some Aspects of their Ethnic and Cultural Background’, International Journal of Middle Eastern Studies, Vol.2 (1971), pp.318–45.

In his encyclopaedic entry on ‘Water Produce’ (Su Ürünleri), Ahmet Günlük claims that most fishermen in Istanbul and Izmir, as well as those operating village dalyan along the coasts of Marmara and the Aegean, were Greek. Evliya Çelebi is often cited in support of this assertion, for example by Kuban who writes that ‘he especially stressed the sailors, sea captains, fishermen and tavern keepers [in Constantinople] were Greek’. D. Kuban, Istanbul, An Urban History. Byzantinon, Constantinople, Istanbul (Istanbul: The Economic and Social History Foundation of Turkey, 1996), p.306. Greek sources (mainly autobiographies) also indicate that at the beginning of the twentieth century most or all fishermen in some communities were Greek: for Gemlik/Kios (on the Sea of Marmara): V. Kulingas, Kios 1912–1922. Anamnisis eos Mikrasiat (Athens, 1988); for Marmaras Islands (close to the Strait of Çanakkale): Salomone; and for Şile (on the Black Sea coast, near the Bosphorus): A. Terzis, Aliste mnimes. Hillites. (Alexandroupoli, 1997).

In 1540 three Rum groups were moved from Trabzon into Constantinople in order to resettle the imperial city: the community of fishermen (cemaat-i balıkcıyan) (138 families), the community of ığrıp fishermen (cemaat-i ığrıçıyan) (18 families), and the community of dalyan fishermen (cemaat-i dalyancıyan) (26 families). H.W. Lowry, Trabzon şehirinin İslâmlaşma ve Türklüğnesi (1461–1583) (Istanbul: 1981), p.84. This may indicate that fishermen in Trabzon were primarily Rum. However, Lowry, p.81, also documents that fishing was among the occupations held by Muslims in 1553.

Kahane et al. *lingua franca*, p.ix.

Koçu, *İstanbul*: ‘Balıkan Emanet’, p.2013, suggests that Muslim and non-Muslim fishermen worked (according to a 1577 edict/ferman) separately, and that it was made clear in the fish hall from which fishermen (Muslim or not) the product came. The reason for this was that the sultan’s household, as well as many other conservative Muslims, did not eat fish caught by non-Muslims. Only a couple of generations later, in 1638, Evliya Çelebi makes almost no mention of such a division. Evliya Efendi, *Narrative*, pp.158–161. In his detailed description of the great procession of the Guilds that the Sultan Murat IV had ordered, he enumerates 11 categories of fishermen (including the imperial household’s own fishermen, who may have all been Muslim). Yet Çelebi makes no note of any distinction along religio-ethnic lines, except to mention that a few Greek fishermen, though exempt from taxes, ‘...are obliged to catch dolphins which serve as medicine for the emperor’, Evliya Efendi, pp.159–60. Although the fishery guilds may have comprised both Muslims and non-Muslims, the produce could still have been separated according to who caught it.

Charles White, *Three Years*, p.52, notes that ‘the whole corps of boatmen [for passenger transport] are Turks and Greek; the former preponderating in the city, the latter nearly monopolizing the Bosphorus’. But, in his chapter on fishing and the fish market he writes that ‘[t]he majority of the dalyan and boat fishermen are Bulgarians, from the vicinity of the Black Sea... Few Turks work at this trade, unless as overseers or agents of government contractors,’ p.90. The retail fishmongers, on the other hand, were mainly Greeks, p.98.


In one of the novels of the well known Turkish novelist Sait Faik, Greek and Turkish fishermen work together and mingle at the same kahve (teahouse) on the Princess Islands outside Istanbul during the latter part of the 1930s. Faik mentions that many fishermen sing the latest hits from Greece, and his Turkish and Greek fisherman characters share the same Istanbul style of seafood consumption and the joy of drinking upon returning with full pockets from selling their catch. S. Faik, *Medarî Maiset Motoru* (Ankara: Bilgi Yayınevi, 1944), Sait Faik Bütün eserleri: 3. A 1952 description of the 20 shops, kahves and meyhanes (place where alcoholic beverages are drunk) in one of the small streets in the fish market area at Eminönü by the Golden Horn shows that Turks were proprietors of only two establishments/shops (and no meyhane). One was run by a Bulgarian, and the rest by Rum. Koçu, *İstanbul*: ‘Balıkçılardan Loncasi Sokağı’, pp.2008–9. The novelist Halikarnas Balıkçı gives some indication of continued contact between Turkish and Greek (sponge) fishermen in the Aegean long after the population exchanges. H. Balıkçı, *Deniz Gurbetçileri* (Ankara: Bilgi Yayınevi, 1969), Halikarnas balıkçısı Bütün Eserleri:10.

T. Deyrolle, *1869’dan Trabzon’dan Erzurum’a Seyahat*, tr. E. Koçu (İstanbul: Çiğir Kitabevi, n.d.). Unfortunately, the Turkish text does not give sufficient information to provide a proper reference to Deyrolle.


Russia invaded and occupied the Ottoman lands east of Tirebolu for two years during 1916–18.


If not specified otherwise, the ensuing discussion is based on the following sources: ‘Su Ürünleri’, in T. Parla (ed.) *Yurt Ansiklopedisi*: ‘İstanbul’ (İstanbul: Anadolu Yayıncılık,

84. Although the sources are somewhat unclear on this point, the state probably transferred the right to tax fisheries to Municipalities. Koçu, İstanbul: ‘Balık Emaneti’, p.2011. This new tax was generally much lower (5–8%) than the state tax (20–22%) had been.


86. Çelikkale et al., Türkiye Su Ürünleri Sektörü, 1999.


90. This institute was established as part of the old Darülfünun (to be reorganized as Istanbul University in 1933) during the early years of the republic. Lack of resources forced it to close towards the end of the 1940s. Acara et. al. (1989), pp.172–3; Ergüven, Ülkemizde Balıkçılık.


92. This institute was reorganized in higher education after the coup in 1980, the Hydrobiology Institute in Istanbul was closed down, and its resources transferred to the ‘Water Produce College’ which was established as a branch of the Ministry of Education in 1973, but affiliated to Istanbul University in 1983.

93. Koçu, ‘Balık ve Balıkçılık’, p.2037. With the reorganizations in higher education after the coup in 1980, the Hydrobiology Institute in Istanbul was closed down, and its resources transferred to the ‘Water Produce College’ which was established as a branch of the Ministry of Education in 1973, but affiliated to Istanbul University in 1983.

94. For example Devedjian’s study, which was sponsored by the Public Debt Administration. Koçu, ‘Balık ve Balıkçılık’, p.2037.

95. This was adhered to by state personnel within the bureaucracy as well as by many scientists. Various permutations of this basic model can be found in the introductions to many different texts, including: textbooks, for example S. Sarpkaya, Su ürünleri avcılığı ve av teknolojisi (Ankara: Gıda Tarım ve Hayvancılık Bakanlığı, Su Ürünleri Genel Müdürlüğü, 1980); reports from the State Research Institutes, for example Karadeniz’de av araç ve gereçleri ile avlanma teknolojisinin belirlemesi projesi (Trabzon: Trabzon Su Ürünleri Araştırma Enstitüsü Müdürlüğü, T.C. Tarım ve Köyişler Bakanlığı Tarımsal Araştırma Genel Müdürlüğü, 1992); symposiums on ‘water produce’, for example Su

103. Sarıkaya, Su ürünleri avcılığı.


106. Öz bey, ‘Ülkemizdeki’ su ürünleri, p.5. I had problems making sense of this quotation, and therefore asked for the advice of Bernt Brendemoen, Professor in Turkish Language at the University of Oslo. I was reassured when he could tell me that the sentence ‘is full of nonsense; it almost sounds like an election campaign speech with a lot of air and little concrete content. It is impossible to turn it into proper Norwegian (or English)’. Guided partly by his comments (in Norwegian), I have produced the present translation that hopefully conveys some of the convolutedness of the language.

107. This also applies to the State Water Produce Research Institute in Trabzon (Trabzon Su Ürünleri Araştırma Enstitüsü), where most junior or young scientists are trained as agricultural engineers. By 1998 this institute had been responsible for a total of 21 research projects (completed, in progress, or new). Despite the overwhelming importance of coastal and ocean fisheries in this region, only eight of these projects were related to fish stocks and fishing, while eight focused on aquaculture and the remaining five addressed ocean pollution. As a curiosity, I also note that ‘water produce’ is mentioned in only one sentence in a long text on agriculture in the 2002 election programme of the Justice and Progress Party.


109. One example is the VI Five Year Development Plan special issue on ‘water produce and water produce industry’, which from the very beginning of the introduction bases its discussion on the concern about nutrition and proteins. Acara et. al. (1989), p.1.

110. In the IV Five Year Development Plan it is stated that in Turkey 17.5% of the population consume too few calories, 10% consume too little protein, and 22.5% have an unbalanced intake of protein. IV Five Years Development Plan, p.462, cited in M. Tezcan, ‘Tu rklerde Yemek Yeme Alıskanlıkları ve Buna İlişkin Davranı ş Kalıpları’, in Türk Mutfakı Sempozyumu Bildirileri (Ankara: Ankara Üniversitesi Basımevi, 1982), p.129.


120. Ibid.

122. In 1987 the Ziraat Bank gave US$ 28 million in ‘water produce’ credits, only a little above 0.5 % of total agricultural credits. Acara et. al. (1989), p.67. Despite pressure from the IMF to reduce the level of subsidized credits and the need to reduce fishing effort in the aftermath of the resource crisis in the early 1990s, the Ziraat Bank gave US$ 20 million in new water produce credits in 1999. www.die.gov.tr/IstTablolar/13ta189t.xls. The interest rate on these loans has until recently been well below inflation and almost half the level of the market interest rate. Investments in harbours were also substantial. In 1982 the investments in harbours were double the value of all water produce credits. Acara et al. (1989), p.66.

123. Although the municipalities collect the fish tax, the revenue is transferred to the state treasury. Fishermen have until recently paid no tax on income or profits. Now wealthy fishermen pay some tax, but the amount is insignificant.

124. Acara et al. (2001), p.113. This measure would of course have no practical effect as the tax level is already quite low.

125. Professor Çelikkale of Sürmene Marine Research Faculty, addressing scientists, fishermen and a general public at the opening of a panel discussion about the Black Sea during the FISHECO98 symposium in Trabzon.


130. The dispersal of the ‘water produce’ research and teaching sector is part of a general trend in higher education and research in Turkey. After the reorganization of the sector following the 1980 military take-over, many institutions of higher education (yüksek okul) without university status have been transformed into universities, and many new universities – both public and private – have been established. This has resulted in far-reaching branching of the sector of higher education and research in Turkey, with increasing quality differences between institutions. A. Öncü, ‘Academics: The West in the Discourse of University Reform’, in M. Heper, A. Öncü and H. Kramer (eds.), *Turkey and the West. Changing Political and Cultural Identities* (London: I.B. Tauris, 1993), pp.142–76; J.S. Szyliowicz, ‘Education and Political Development’, in M. Heper and A. Evin (eds.), *Politics in the Third Turkish Republic* (Boulder: Westview Press, 1994), pp.147–59.

131. That means, for instance, that the unit responsible for ‘Water Produce Control and Protection’ is a ‘Water Produce Section’ (Şube) which reports to the ‘Fisheries, Environment and Disasters Department’ (Daire) under the ‘General Directorate (Genel Mühür) for Protection and Control’, whilst statistics are handled by a ‘Water Produce Department’ in the ‘General Directorate for Agricultural Production and Development’, and research is administered by a ‘Water Produce Section’ within the ‘General Directorate for Agricultural Research’.


133. Alexander, *Personal States*. 

135. Today there are few dalyans left. It seems as if their use gradually decreased from around the turn of the century until the mid-1970s. The big dalyan at Beykoz (in the Bosporus) was, as the last dalyan in Istanbul, put up for the last time towards the end of the 1980s. Today only a much smaller dalyan is erected at Beykoz. Several factors have combined to relegate the dalyans to history: competition from boat fishing; the disappearance of migratory fish such as swordfish and mackerel; the fact that fish do not approach the shore any longer because of human activity, Pasiner, ‘Dalyan’, p.545; the restrictions caused by the increased traffic in the Bosporus, Sarıkaya, su ürünleri ancılığı, p.93. In a 1972 government fisheries survey there is almost no mention of dalyans. For instance, it is not entered in the listing of the various catch techniques currently employed. 1972 Yılı Türkiye Su Ürünleri Ekonomik Araştırmaları (Ankara: Ministry for Food, Agriculture and Stockbreeding, General Directorate for Marine Products, 1974), p.21. Sarıkaya, p.105, lists 25 dalyans along Turkey’s Aegean and Mediterranean coasts in 1975. In 1989 twelve dalyans – all of them in the Aegean and Mediterranean seas and lakes – were reported to be still in operation; however, most of them were small scale and rather dilapidated. I. Mert, ‘Ülkemizde su ürünlerinin beş önemli problemi ve çözüm’, Tarım, Orman ve Köyşleri, No.38 (1989), pp.30–31. In addition, some small-scale weirs (kuzuluk) are used in lagoons and lakes in Turkey.


139. M. Meeker, A Nation of Empire. The Ottoman Legacy of Turkish Modernity (Berkeley: University of California Press, 2002).

140. See ‘Water Produce Law’ 1380/3288, para.12.

141. Denizlerde ve İçsurlarda Ticari Amacı Su Ürünleri Avcılığını Düzenleyen 35/1 Numaralı Sirküler (Ankara: Ministry for Agriculture and Rural Affairs, 2002), para. 19. Recently the practice of dalyan and voli fishing became even more restricted when the ministry decided not to grant any new permits. The bureaucrats discourage their use because they allegedly catch fish in the reproduction season. They indicate, however, that the practice of dalyan and voli fishing conflicts with other more important uses of the sea space.


143. Pasiner, p.545.

144. The most important being the prohibition of all professional fishing during summer and the ban on trawling in the eastern Black Sea region.

145. Whilst fishermen now tend to express the idea that the sea is free, bureaucrats often stress that the state owns the sea. A character in one of Faık’s novels states that ‘The sea belongs to Allah and the state’, implying that it is free and open to all. Faık, p.77.


148. Indeed, the voli in Elegü (Beşikdüzü) – the only one in this region mentioned by Devedjian, Pêche – had, in the view of the state, free access.

For example, I˙. Mert, ‘Su ürünlərinin korunması ve kontrolünün sağlanabil-
mesi için mevcut yasada düzenlemelere gidilmesi gerekmemektedir’ (Interview), Su Ürünleri 

The reference to oto kontrol has been adopted by bureaucrats, scientists, and even some 
fishermen. When I met the leader of a ‘water-produce’ section in the central administration 
in 1998, he repeatedly asserted that the cooperatives ought to practise auto-control. 
Similarly, a scientist at the Faculty of Marine Science at the Karadeniz Technical 
University in Trabzon claimed that auto-control, ‘as in Japan’, was the solution to 
overfishing in the Black Sea.

N. Akder, Bilişim Davası ve Örf Korkusu (Ankara, 1976). The copy made for me at the 
Istanbul Central Library (Istanbul Merkez Kütüphanesi) does not include enough 
information for a complete reference.

Convergence between Turkish Fishermen and Marine Scientists’ (Dr. Polit. thesis, 
University of Bergen, 2001).


R. Aydın, A.A. Öğüt and T. Erengil, Kooperatifçilik, et sanatlari, tescik ve destekleme 
(Ankara: Ministry for Agriculture and Rural Affairs, Teşkilatlama ve Destekleme Genel 

J. Starr, Law as Metaphor. From Islamic Courts to the Palace of Justice (Albany: State 

I explore these issues further in S. Knudsen, ‘Is there indigenous knowledge in the Middle 
East? Towards a reassessment of knowledges in management of common pool resources’, 
Paper presented at the 10th Biennial Conference of the International Association for the 
dlc.dlib.indiana.edu/view/conferences.html

In this effort the state has not acted alone. International organizations such as foreign 
consultants, the World Bank, NATO, EU and UN organizations, or, more recently, Turkish 
NGOs such as the Istanbul Chamber of Trade or TURMEPA, support, through their 
sponsorship of research for example, the ideal of ‘governmentality’, the reference to the 

If the state representatives were to be more informed about the tradition of fishing, this 
would most probably be knowledge of ‘forms’. Yet, definitions of ‘tradition’ that pay too 
much overt attention to ‘forms’ (e.g. the pattern of molozma fishing) may be misleading and 
of little use. They risk being essentialized and reified, and can imply ‘frozen’ tradition and 
practice, or complete collapse of or break with tradition, although below the surface there is 
continuity. But the ‘tradition’ I have described is a dynamic continuity, open to innovation 
and adaptation to new circumstances. The non-formalized and non-inscribed (e.g. in local 
or state legal codes) ensures the potential for dynamism. Excessive formalization may be 
unresponsive to new management needs as local adaptations meet changing circumstances 
(see Knudsen, 1995, for an elaboration). The EU-accommodation process promises to 
transform the fishery sector, making it more ‘manageable’. Like many other sectors in
Turkey, fishery management is to be redesigned according to EU standards and norms. Changes will include a new fisheries law, the establishment of a certain number of authorized port offices, a vessel monitoring system, close co-operation with fishery bureaucrats from an EU-country, and the establishment of a bureaucratic unit that will coordinate all fishery policy and management.