

**RECONCILING SCIENCE WITH
ISLAM IN TURKEY: ISLAMIC
JOURNALS IN PERSPECTIVE**

BURAK TAMAÇ

108605005

**İSTANBUL BİLGİ ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
ULUSLARARASI İLİŞKİLER
YÜKSEK LİSANS PROGRAMI**

Tez Danışmanı: Yrd. Doç. Dr. BOĞAÇ EROZAN

2010

**RECONCILING SCIENCE WITH ISLAM IN
TURKEY: ISLAMIC JOURNALS IN
PERSPECTIVE**

**TÜRKİYE'DE İSLAMİ DERGİLERDE BİLİM
İLE İSLAM'IN UZLAŞTIRILMASI**

**Burak Tamaç
108605005**

Supervisor: Asst. Prof. Dr. Boğaç Erozan :.....

Jury Member: Asst. Prof. Dr. Pınar Uyan Semerci :.....

Jury Member: Asst. Prof. Dr. İlay Romain Örs :.....

Date of approval: 07/06/2010

Total Pages: 111

Anahtar Kelimeler

- 1) Modernist İslam**
- 2) Positive Science**
- 3) Positivism**
- 4) Scientific Methodology**
- 5) Theophany**

Keywords

- 1) Modernist İslam**
- 2) Pozitif Bilim**
- 3) Pozitivizm**
- 4) Bilimsel Yöntem**
- 5) İlahi Görünüm**

**RECONCILING SCIENCE WITH ISLAM IN TURKEY:
ISLAMIC JOURNALS IN PERSPECTIVE**

**TÜRKİYE'DE İSLAMİ DERGİLERDE BİLİM İLE İSLAM'IN
UZLAŞTIRILMASI**

**Burak Tamaç
108605005**

Supervisor: Asst. Prof. Dr. Boğaç Erozan

: 

Jury Member: Asst. Prof. Dr. Pınar Uyan Semerci :

: 

Jury Member: Asst. Prof. Dr. İlay Romain Örs :

: 

Date of approval: 07/06/2010

Total Pages: 111

Anahtar Kelimeler

Keywords

1) Modernist Islam

1) Modernist İslam

2) Positive Science

2) Pozitif Bilim

3) Positivism

3) Pozitivizm

4) Scientific Methodology

4) Bilimsel Yöntem

5) Theophany

5) İlahi Görünüm

ABSTRACT

This study examines the relation between positivism and Islam in Turkey. It focuses on the idea of “reconciling science with Islam” based on a study of Islamic discourse in some Turkish journals. In this context, the aim of this study is to demonstrate how the positivist approach became a viable component in Islamic discourse through considering the journals of *Sur*, *Zafer*, *Sızıntı* and *Altınoluk* by covering the period from the late 1970s until today.

Firstly, the importance of the educational reform in accordance with accommodating the positive sciences with the Islamic values is examined by addressing to approaches of Jamal-al-Din Afghani, Muhammad Abduh and Muhammad Rashid Rida. Secondly, due to the necessity of bridging between the modernist approach and the efforts of Bediüzzaman Said Nursi and Mehmet Akif Ersoy, the common ground, which was fostered by Young Ottomans and Ziya Gökalp, is studied. Both legacies of modernist approach and the positivist thought in Turkey have contributed to the use of positivist methodology in Islamic discourse, specifically through literary sources.

The analysis of the Islamic journals of *Sur*, *Zafer*, *Sızıntı* and *Altınoluk* shows that the endeavor of recasting the perception of science, pursuing the theophany and the use of science in technology and health issues mark the crucial points where the problematical application of science occurs. Namely, the Islamic discourse instrumentally utilizes the positivist methodology to response the cultivation of science by reconciling science with Islam. Therefore, the Islamic discourse molded the scientific discourse of positivism to its own shape.

ÖZET

Bu çalışma Türkiye’de pozitivism ve İslam arasındaki ilişkiyi irdelemektedir ve Türkiye’deki bazı dergilerde İslami söylemde temellenmiş “bilim ile İslami uzlaştırma” düşüncesine odaklanmaktadır. Bu bağlamda çalışmanın amacı, 1970’lerin sonundan günümüze kadarki süreyi kapsayarak, *Sur*, *Zafer*, *Sızıntı* ve *Altınoluk* dergileri ekseninde, İslami söylem içerisinde pozitivist yaklaşımın nasıl “makul” bir bileşen haline geldiğini göstermektir.

İlk olarak, Cemaleddin Afgani, Muhammed Abduh ve Muhammed Reşid Rıza’nın modernist yaklaşımlarına göndermede bulunularak, pozitif bilimlerin İslami değerler ile uzlaştırılması bağlamında, eğitim reformunun önemi incelenmiştir. İkinci olarak ise, modernist yaklaşımın katkıları ile Bediüzzaman Said Nursi’nin ve Mehmet Akif Ersoy’un çabaları arasında bir köprü kurma ihtiyacını karşılamak için, Yeni Osmanlılar ve Ziya Gökalp tarafından beslenen ortak zemin üzerinde durulmuştur. Hem modernist yaklaşım hem de Türkiye’deki pozitivist düşünce –özellikle yazınsal kaynaklar aracılığıyla– İslami söylemde pozitivist metodolojinin kullanımına katkıda bulunmuştur.

Sur, *Zafer*, *Sızıntı* ve *Altınoluk* dergilerinin analizi göstermektedir ki, bilim algısını yeniden şekillendirmek, doğada Allah’ın görüntüsünün izini sürmek ve sağlık ve teknoloji konularında bilimi kullanmak, bilimin sorunlu kullanımının ortaya çıktığı bir çabayı göstermektedir. Yani İslami söylem bilimin yükselişine cevap verme ihtiyacından dolayı, bilim ile İslamı uzlaştırmak için pozitivist yöntemi araçsal olarak kullanmaktadır. Bu nedenle İslami söylem bilimsel söylemi kendi formuna göre biçimlendirmektedir.

CONTENTS

INTRODUCTION	1
1. POSITIVISM: FROM THE WEST TOWARD THE EAST	7
1.1. Modernist Approach in Islam.....	7
1.2. Contributions of Jamal-al-Din Afghani, Muhammad Abduh and Muhammad Rashid Rida	11
2. INFLUENCES OF POSITIVISM IN TURKEY: INTERACTION BETWEEN SCIENCE AND RELIGION	25
2.1. Young Ottomans: Between the “old” Islamic and the “new” Western Values	27
2.2. Ziya Gökalp: Distinction Between Culture and Civilization	34
2.3. A History of Reconciling Science with Islam in Turkey: The Cases of M. Akif Ersoy and Bediüzzaman Said Nursi	37
2.4. From the Theoretical Legacies to the Islamic Journals	48
3. ISLAMIC JOURNALS: SUR, ZAFER, SIZINTI AND ALTINOLUK... ..	52
3.1. General View of the Islamic Journals	52
3.2. The Perception of the Science in Islam	60
3.3. Observing the Nature: Pursuing the Theophany	68
3.4. The Use of Science in Technology and Health Issues	80
CONCLUSION	87
BIBLIOGRAPHY	93
APPENDIX	105

INTRODUCTION

“One would have expected that the success of a religious leader like Said Nursi would have aroused the curiosity of his very detractors and that they would have made an attempt to unravel the intricacies of his influence. Such adjectives as reactionary, tricky, and exploitative do not fill this need.”

(Mardin 1989: 2)

This study concerns the effort of relating relatively two discrete subjects which are generally defined as being poles apart: religion and positivist thought. The reason of defining these two concepts distinctively might be on account of that while the religious conception is based on metaphysical considerations, the positivist thought is composed of an examination which studies only material facts (Comte 2001: 37). Nevertheless, the contiguity of these two distinct conceptions emerges in both sides. On the one hand, the religious thought steps in the mundane matters belonging to the social sphere; and on the other hand, the attitude of positivist thought intrinsically eliminates the metaphysical area (see Carnap 1966) due to its self-evident character (see Schlick 1999: 42). Thus, even though religion and positivist thought address two different spheres, they also have a tendency to explain each other's domain.

From this perspective, the research question of this study is about how the positivist approach became a viable component in Islamic discourse in Turkey so that this juncture produced reconciliation of science with Islam? In spite of placing the question of how in the research question, this work is mainly based on a study that aims firstly to reveal the influence of Western thought in the contributions of the modernist Islamic approach, secondly

seek for a common ground of the “new” Western values and the “old” Islamic values in the history of Turkish intellectual life, and finally demonstrate the use of positivist methodology in current Islamic journals in the light of this theoretical background. Namely, this work examines the penetration of Western thought to the Islamic world in general and the kernels of influence of positivism in Turkish intellectual life. It tries to demonstrate how positivist thought takes part in Islamic discourse by focusing on four Islamic journals, namely, *Sur*, *Zafer*, *Sızıntı* and *Altınoluk*.

As it was quoted at the beginning of this part, when Şerif Mardin pointed out what did not fill the need of examining the complex results of influences of Said Nursi, who is the most significant character in Turkey in terms of accommodating the use of positive science with Islam, the role of Islam in Turkish society was being recast by communities which transformed to active players in Turkish social and political life. It could also be claimed that the notion of being active in society determines the shape of attitudes in Turkey specifically after 1980 (see Kara 2003; Şeriatı 1992). Hence, the motives which channeled me to study this subject is firstly the change of attitudes of Islamic communities toward growing interest in using the positivist methodology in conformity with the religious values, and secondly the neglect (or omission) of such a study in literature that makes this work rewarding.

In this regard, the beginning point of studying this topic is basically the change of Islamic discourse on using the positivist methodology in reasoning of the religious/metaphysical issues. Although theoretical background trace back to earlier periods, Islamic discourse had to wait for generating the basis to arouse or revitalize itself until early 1980 in Turkey. The limits of this work do not leave much room to make an exhaustive elaboration on this period; nevertheless, it is not unfair to say that the change of the role of religion in Turkey during 1980s played a decisive role in revitalizing efforts in Islam via establishing the field to act in as a social actor.

Although the first pillar, positivism, refers various forms of conception (French positivism and English positivism), I address the positivist philosophy of Auguste Comte in arguments, because his ideas were the most prevalent ones in Turkish intellectuals. In general terms, positivism or the method of positive thought has been shaped by multiple variables that were explicitly interrelated; and it appeared systematically in the second half of the nineteenth century when the new method was marked or coined as positivism.

In the first place, the methodological concerns of positive philosophy have distinguishable character in a scientific research. It is essentially claimed that the scientific knowledge could only be acquainted by means of observation and experiment. Furthermore, as Comte points out that a theory requires an observation in essence (2001: 35); and due to confining to the material facts in a scientific research, theological or metaphysical considerations and positivist argument are inherently distinctive (2001: 37).

In the second place, the social and political situations, which were mainly formed by the historical conjuncture of France after the French Revolution, remarkably impressed the formation of the positive thought. Auguste Comte pictured the social and political conditions in France after the French Revolution in detail; and one would argue that the historical conjuncture in France, where revolutionary movements and disorganized society occurred, had determinative role in Comte's philosophy. The French Revolution resulted in the disturbing social and political changes in the context of Comte; for this reason, the positivist philosophy was not only formulated as limited to scientific environments, but also applied to social and political spheres in order to response the social and political movement called anarchy, and reorganize the society. Comte claims in his early writings that the society was disorganized both from spiritual and mundane points of view, and re-organizing the "new" society suits human nature:

A social system which is dying, a new system whose time has come and which is in the process of taking definite shape, this is the fundamental character which the general course of civilization has assigned to the present age. In conformity with this stage of things,

two different kinds of movement are today striving society: one of disorganization, the other of reorganization. By the first, considered in isolation, society is drawn towards a profound moral and political anarchy which seems to threaten it with imminent and inevitable dissolution. By the second, it is led towards the definite social state of the human race, the one which best suits its nature, that in which all its means of prosperity are to receive their fullest development and their most direct application. It is the coexistence of these two opposed tendencies that constitutes the great crisis experienced by the most civilized nations. If we are to understand it, we must consider it in this dual aspect (1998: 49).

Another considerable subject regarding to the legacies of the Enlightenment is the concept of progress. Auguste Comte formulates positivism or the scientific and industrial era as the point to reach after elapsing theological and metaphysical eras. Situating both theological and metaphysical stages into evolution provides a comprehensive character to positivism, and it gives ascendancy to positivism over theological and metaphysical eras, or positive philosophy (observation and experience) over mind (imagination). In other words, Comte develops the three stages for appraising the positivist stage as the one where humankind reaches by transcending the theological and metaphysical stages (Comte 1998: 119-120). Basically, what this work examines is the deformed genre of three stage principle of positivist philosophy in Islamic discourse by elaborating the interaction between positivism and Islamic thought in Turkey.

As to the second pillar, which is Islam, consists of religious practices of Islamic communities, such as *Nurculuk* and *Nakşibendi* order in Turkey. As it is discussed in the third chapter, the difference between *Nurculuk* and *Nakşibendi* order is not the one which consists of two opposite sides. It could also be pointed out that *Nurculuk* is an offshoot of the *Nakşibendi* order, yet the differences between them have been crystallizing up to the present time. The reason of taking those communities into consideration in my argument is contingent upon firstly that those communities are the most predominant and widespread ones in Turkey. And secondly, the influences of positive sciences are explicitly apparent in journals of those communities: *Sur*, *Zafer* and *Sızıntı* in *Nurculuk* and *Altınoluk* in *Nakşibendi* order.

Nevertheless, the audiences of those journals are not limited to those Islamic communities. This shows the comprehensiveness of their approach.

The main goal of this work is to demonstrate the elements of the attitude which intends to reconcile science with Islam in Turkey by reappraising the role of positive sciences in Islamic consideration. The roots of contiguity between the Islamic discourse and positivism in Turkish history do not go beyond the legacies of the nineteenth century in which the Western impact and traditional Islamic values gained the social and political ground for interaction. In this regard, the experience of *Tanzimat* period marks a watershed respecting the apparent influence of Western thought on Turkish social and political life. On the other hand, the contributions of Islamic scholars, who are Jamal-al-Din Afghani, Muhammad Abduh and Muhammad Rashid Rida, also affected the revivalist movement in Turkey. The basic argument of modernist tradition shaped by Afghani's legacy that directed the Islamic modernist approach in Turkey in the late nineteenth century is response to the Western civilization by means which are believed to provide relatively ascendant position to the Western civilization, i.e. application of positive science, particularly to education.

This study confines to the examination of four Islamic journals in which the influence of positivist methodology has distinctive character: *Sur*, *Zafer*, *Sızıntı* and *Altınoluk*. Every single of these journals are analyzed; *Sur* since 1976, *Zafer* since 1977, *Sızıntı* since 1979 and *Altınoluk* since 1986. Although the use of positivist methodology is not always the case in the journal *Altınoluk*, its theoretical stand resembles to other three journals. Another reason of including *Altınoluk* to this work is the assumption that any Islamic approach has to response cultivation of science whether by applying positive sciences to its discourse, which is the case in *Sur*, *Zafer* and *Sızıntı*, or proposing to the use of science in a large extent, which is valid for *Altınoluk*.

In sum, this work consists of three chapters. The first chapter is concerned with the initial efforts of using the positivist methodology or having contiguity with Western thought in the East. On this respect, the

argument is shaped by reference to the contributions of early Islamic scholars in modernist tradition: Jamal-al-Din Afghani, Muhammad Abduh and Muhammad Rashid Rida. The reason of including those scholars' legacies is that their emphasis on movements and intellectual life in Turkey played an essential role. Especially the role of educational reform in their formulations affected the reform movements in Ottoman Empire in the late nineteenth and the early twentieth century.

In the second chapter, I attempt to dwell on the influences of the thought of positivism in Turkish intellectual life by examining the interaction between science and religion in Young Ottoman thought and intellectual contribution of Ziya Gökalp. Fluctuating between the "old" traditional Islamic values and the "new" Western thoughts identifies the general theme of this period, which paved the way for penetration of positivist thought to Islamic discourses afterwards. The influences of modernist tradition of Afghani and the most precise example of contributions to the effort of reconciling science with Islam in Turkey appeared in endeavors of Bediüzzaman Said Nursi and M. Akif Ersoy, which forms the essential argument at the end of the second chapter.

And then I analyze the Islamic journals of *Sur*, *Zafer*, *Sızıntı* and *Altınoluk* in terms of the use of positivist methodology in their arguments. In order to avoid repetition of similar discussions in those journals, I examine them as classifying into three topics: The perception of science, application of scientific methodology, pursuing the theophany by observing the nature, and the use of science in technology and health issues.

1. POSITIVISM: FROM THE WEST TOWARD THE EAST

1.1. Modernist Approach in Islam

Introducing a modernist approach in Islam has started at the end of the nineteenth century and gained impetus in the first quarter of the twentieth century. Various reasons and contributions could be examined in this context; nevertheless, due to limit of the work, endeavors of Jamal-al-Din Afghani, Muhammad Abduh and Muhammad Rashid Rida have priority in order to comprehend the notion of modernist approach in Islam; and of M. Akif Ersoy and Bediüzzaman Said Nursi in the Turkish context. Prior to elaborating the pioneering character of Afghani, Abduh and Rida's modernist approach, it is needed to review foundations of relations between modernism and Islam.

Islamic modernist discourses formulated and expounded the positive character of Islam toward science and technology. Although according to the Cartesian thought faith and reason operate in different spheres, the modernist claims shaped around Islam are characteristically not only avoiding to hinder cultivation of science and technology, but also facilitating them as regarding positively accommodation with human development.

In general, two basic treatments to modern knowledge have been adopted by modern Muslim theorists. Firstly, that acquisition of modern knowledge confined to the practical technological sphere and intellectual legacy of the West might create doubt and disruption in the Muslim mind; secondly that Muslims without fear can and ought to acquire not only Western technology but also its intellectualism, since no type of knowledge could be harmful (Rahman 1984: 46-47). In this context, response of modernist approach to

imitation marks a watershed owing to its proposition that expedites comprehending the argument of modernist approach in Islam.

Discussions molded from imitation of the West frequently object to intellectual and cultural values of the West on account of possibility of damaging the essence of Muslim society. Nevertheless there was no remarkable dispute with imitating the methodology of technology and science of the West in modernist approach in this context. Most of the arguments are concerned with cultural and particularly philosophical topics.

A comparison of Islamic experiences with the Western ones is inevitable in connection with dissimilarity of the confrontation with science and technology. Historically, Islam has never experienced a reform in terms of doctrine and practices of worship as similar to Protestant reformation period in the sixteenth century. Unlike in Christian tradition, when the new problems occurred in Islam, procedures were confined to consultation of Qur'an and Hadith as a result of strict conservation of those sources. In addition, denying of any absolute authority except Qur'an and Hadith sustained the limitation in consulting, too (Sitembölükbaşı 1995: 147). Generally, limitation of sources in consulting is pervasive in modernist approach, which produces binary structure of formulations: adhering to traditional values and accommodating with the scientific and technological development of the West.

The first and the fundamental reason behind unavoidable confrontation with Western values is that Muslims stayed behind of the development process as a result of being detached from the "real" Islam. Substantially, Islam does not stand against reason and scientific development; hence science and the faith of Islam are not in conflict. As İsmail Kara claims that Islam could not be the reason of defeat, regression, decay, and decline of ethic; as a matter of fact the reason is Muslims (2005: 36).

In addition to this, Fazlur Rahman's analysis clarifies the point. For him, the real nature of this crisis between modernism and Islam would not occur as a consequence of the Muslim social institutions in the past that were wrong or irrational, in fact there has been a social system which now needs

to be modified and adjusted (1966: 214). He concludes the argument of modernism via pointing out that Islam has become internally incapable of reconstruction, and it can only be done by influences and borrowings from the West (1996: 213).

Emphasizing the importance of reason in verses of Qur'an is another way of reasoning the significance the conformity of Islam with science. Almost every social practice was rooted in Qur'an and became a matter of science. Therefore the term "science" is stated seven hundred and fifty times in Qur'an included nouns and verbs derived from it, but wisdom, awareness, comprehending, reasoning and many words derived from them excluded (İşcan 1998: 171).

As a consequence of examining the reason for regression in Islam might be compared with Christianity. Experiences of humanity in Christianity in terms of modernization process generally lead to two consequences: conflict and distinction between religion and science. Nonetheless, there were no such consequences in Islam as Christianity faced; because the concept of science has never had a significant meaning and possessed of status in other religions as it had in Islamic culture (İşcan 1998: 170).

The method in modernist approach generally consists of educational and political elements, however the social dimension might be thought as rousing factor in wholesale movement. In this regard, Ali Shariati argues that a society could not be changed or transformed by means of advices, articles, moral texts and banal sermons of parents; on the contrary it could be changed by intellectual awakening, a science, faith and creating responsibilities (1992: 230). Basically, what Shariati claims is that a passive society prototype in Islam ought to be evolved toward active society because regression was caused due to this social attitude (see Kara 2003). Beside social perspective, political and educational dimensions ought to be examined, but I try to go in detail of educational efforts rather than political ones due to focusing on the central argument of the study.

Predominant method that has taken place in Islamic societies in response to Western development is mostly seen in replying with means which is

believed to provide relatively advanced position to the West in Islamic discourse. Those means are positive science, technology, military and industry. Şehbenderzâde Filibeli Ahmed Hilmi and Ziya Nur Aksun assert a similar method in this context, which is that salvation in Islam would be possible by utilizing natural sciences and educational progress in social welfare in Islamic society as it occurred in Christianity (2006: 308). They furthered the argument by proposing the methods of reform that should be done in each Islamic state: assignment and distribution of responsibilities of *ulama*, adjustment of madrasah in accordance with new forms and methods of schools, regulating teaching, and training a particular class which has authority in religious administration of districts (2006: 314). Educational reform in the proposition is apparent in Hilmi and Aksun's formulation, which prevail in the whole modernist approach in Islam.

In the methodological aspect of modernist approach in Islam, *ijtihad* plays a fundamental role, because it is a legal interpretation in Islamic law as response to new problems. Classical Muslim jurists conceived that *ijtihad* is the exertion of mental effort in the search for a legal opinion to the extent that the faculties of the jurist become incapable of further effort (Hallaq 1984: 3), however most of the modern scholars proclaimed that "the gate of *ijtihad*" is open. Islamic scholars who sustain the openness of the gate of *ijtihad* argue that the decline and relying upon the imitation in Islam especially after the twelfth century resulted in being out of the development process, losing dynamics and regression (Kara 1998: 59-60). As it can be seen that an effort of interpretation of Islamic law basically depends on the individual effort, yet Şehbenderzâde and Elmalılı were in favor of constituting an institution for *ijtihad* instead of individual endeavor, e.g. *Meclis-i Ali-i İctihad, Heyet-i İlmiye* (Kara 1998: 61). Consequently, it could be fair to say that *ijtihad* directly has contributed to the intellectual regeneration and development of modern Islam due to comprehending for various dimensions: freedom, equality, progress, human rights, democracy, technology and science.

On the whole, it appears that modernist approach in Islam has different dimensions to deal with, but the most comprehensible issue is the method of constituting a relationship with the West, or the idea of the West which is conceived as an advanced society in consequence of its scientific and technological developments. Modernist Islamic scholars mostly start their argument with educational reform, because usage and pervading of positive science could only start from educational system. In this sense, contributions of Jamal-al-Din Afghani, Muhammad Abduh and Muhammad Rashid Rida have played a critical role in Muslim world and especially in Turkey.

1.2. Contributions of Jamal-al-Din Afghani, Muhammad Abduh and Muhammad Rashid Rida

Contributions of Afghani (1838 – 1897) to modernist approach in Islam have played a fundamental role in shaping the modernist tradition. Essentially what Afghani and Abduh attempted was to recast a modernist form of Islam. According to Fazlur Rahman, Afghani is the first genuine Muslim modernist, and the first modernist idea of political reform was voiced by him (1966: 216), which gives an idea for understanding his position in modernist tradition. Prior to examining his intellectual endeavors, his personal experiences are needed to be emphasized, since his educational process shaped his intellectual attribution.

Afghani stayed in Kabul until the age of eighteen and obtained his first education from his father Safder who was a respected scholar in that time in Afghanistan. Besides, he had been trained by famous scholars in Afghanistan particularly on language, history, religion, philosophy, mathematic, medicine and politics. His journey to India led him to acquaint with European science and literature, which strengthened and formed his reformation idea (Karaman 2007: 21-2).

Afghani is renowned with his journeys and places he visited: Iraq, India, Egypt, Istanbul, Paris, London, Moscow and Saint Petersburg (Ramazan 2005: 64). Those journeys definitely affected his intellectual considerations,

specifically confrontation to Western values, which were basically considered with scientific and intellectual ones.

For Afghani, the fundamental reason of declining of Islamic societies was not the religion of Islam, but basically Muslims. Thus, Islam is not against reason and science. He also stresses the importance of Islam within societies as a regulative role via its solidarity (Afgani 1956: 117) that prevails throughout modernist approach.

Afghani essentially was trying to get the Muslims to gather round as a banner which was necessary to prevent political decline (Mardin 1989: 74). In his consideration, colonial existence of the Western states in Muslim world affected the political decline of the Muslim societies on a large scale. In order to amalgamate Muslims, reformation is indispensable, since old and traditional values of Islam were not able to arouse Muslims and unite them in a single purpose. His reformation idea is concerned with educational reforms, political activeness, religious consciousness and scientific awareness. In this context, his religious stand resembles to renaissance, insomuch as stressing *ijtihad* (interpretation), improving reasoning and avoiding actual mentality of science (Ramazan 2005: 103). As many modernist scholars in Islam have done, Afghani have proclaimed that the gate of *ijtihad* is open (Ramazan 2005: 88), and a person who is capable of Arabic language, *ijma* (consensus), *qiyas* (analogical reasoning), and Hadith could make an individual interpretation and judgment (Karaman 2007: 38).

One of the most effective apparatus of his time to disseminate political and social ideas was the press, journals in particular. Accordingly, he had published a journal called *el-urvetu'l-vuska*, which means handhold, that played a key role in spreading Afghani's opinions on reformation not only in Muslim societies, but also in European ones as well, since *el-urvetu'l-vuska* firstly published in 13 March 1884 in Paris, and lasted eight months. Certainly, Afghani was not alone in publishing *el-urvetu'l-vuska*. Muhammed Abduh, who is his student, was also stated in a considerable position in this endeavor. In addition to that, Muhammed Karaman asserts that most of the articles published in *el-urvetu'l-vuska* belonged to Afghani

in terms of thoughts and Abduh in terms of expression and style or writing (2007: 33).

General ideas of the *el-urvetu'l-vuska* are the awakening of Muslim states against the colonizer West, the uniting of Muslims against external threats, the application of positive sciences to the needs of Muslim societies and abstention from imitation of Western values. One can argue that the former idea of *el-urvetu'l-vuska* that was way of existence of the West, which could be defined as colonial one, motivated and impelled Afghani toward constituting a reform program which was concerned with the social and political salvation of Muslim world. Prevailing use of the political West (colonist) in his writings underpins the argument.

Afghani emphasized two basic issues for salvation in Islam: appealing the unity of Islam that suffered from colonist intervention of the Western states into the Muslim world, and recasting the form of Islamic culture in the context of education, specifically toward positive sciences. The unity of Islam, in other words *pan-islamism* or *ittihad-i Islam* was in a crucial position of his reform program. He might not be the inventor of the idea of *pan-islamism*, but he was precisely its adjuster, re-generator and spreader.

Although his considerations were mainly inclined to political sphere which was influenced by the events of his period, i.e. colonist existence of the West, very strong effectiveness could be observed both in religious and social spheres (Ramazan 2005: 72). It would be fair to say that one of the most important interests of Afghani was educational reform beside political goals. He made a powerful appeal for the development of scientific discipline by general educational reforms; and his ultimate purpose for educational reforms was to strengthen the Islamic societies against to the Western states (Rahman 1966: 216). As it can be seen, his political goals are meshed in with educational ones.

The basic idea of Afghani's educational reform was based on the modernization of the system that relies on adaptation of positive sciences in classical pre-modern educational system. A way of relating to the West might be seen contradictory here; but the one hand he opposed to West and

its colonialism in political level, on the other hand he was inspired by methods and developments of the West in social, scientific and technological level (Ramazan 2005: 63). Therefore, it can be expressed as ambivalence relations with the West, which significantly penetrated to intellectual life in late Ottoman period.

Merely educational reform is not capable of transforming the society, thus ethical and philosophical basis are compulsory for a wholesale reformation movement. Correspondingly, Afghani believed that educational reform without philosophical and moral basis could not meet the need of Muslim societies, because imitation and baseless educational reform would only lead superficially awareness of the meaning of Western civilization (Mardin 1989: 81), which is useless and even harmful for development in Islamic societies.

Another concern has been taken into consideration by Afghani is the threat of the naturalism or materialism. He wrote the book named *Al-Radd 'ala al-Dahriyya* (Refutation of the Materialists) as response to materialist idea. Underlying goals of writing this book might be positioning Islam against to Western powers, colonialism particularly, and demonstrate the efficiency of regulator role of Islamic tradition in Muslim societies (1956). The aims of materialists or naturalists were to eradicate Islamic institutions (1956: 51), demolish the bond between people and the religions, which would result in total disaster in society (52). As a consequence, aims of committing to the paper of *Al-Radd 'ala al-Dahriyyi* were inviting Muslims for the unity of Islam and emphasizing the regulator character in Islamic societies against any particular attitude of materialist or naturalist thought.

His influence on reform movement appeared in Turkey as well. Specifically *Tanzimat* reforms and constitutional periods formed a ground for his effectiveness throughout the nineteenth century. Reflections of Afghani's reform program occurred in Turkey before he came in 1869 when his ideas resulted in controversies. His opening speech in the *Dârülfünûn* (University) in Istanbul engendered several discussions. Some journals and newspapers manipulated his speech as he intended to subordinate religion to

positive sciences (Mardin 1993: 15) and swiftly spread false opinion about him. Those controversies led to closing down the University and some exculpation attempts in Islamic journals such as M. Akif in *Sırat-ı Müstakîm* (Ersoy 1997a: 461-3).

His influence in Ottoman intellectual life did not only occur in political and social level, but also in intellectual level, too. M. Akif Ersoy states that most of the scholars and intellectuals in Istanbul were affected by his reform program (Ersoy 1997a: 461) especially in political level, as Karaman classified, such Turkists as M. Emin Yurdakul, Yusuf Akçura and Ahmet Ağaoğlu; pan-Islamists as M. Akif, Hamdi Efendi and Said Nursi; reformists as Seyyid Bey and Şemseddin Günaltay (2007: 45); and some members of Committee of Union and Progress (Yalçınkaya 1991: 68). With regard to his influences in Ottoman Empire, İsmail Kara stresses that it is significant that the emergence of the idea of *pan-islamism* or *islamcılık* (1872) almost overlapped with his first journey to Istanbul (1870) (1998: 28).

His political reform program aroused excitements about his ideas, since it meshed in with nationalism. On the point of political goals of Afghani, basically three points needed to be stressed: the religious bond, hadj and caliphate (Karaman 2007: 42). However those aims could not be succeeded by a wholesale movement in Muslim World. Accordingly, the only way of wholesale development depending on each Muslim state was to strengthen their own internal institutions, language, which was the most important element in his concept of nationalism, and traditional values. When each Muslim state enforced their national values, then whole Islam world would become as powerful as to be capable of resisting imperialism (Yalçınkaya 1991: 45). Thus, nationalism was a previous step before the unity of Islam, which directly affected political movement in Turkey toward rigid nationalism.

Although many intellectuals approached positively to Afghani and his legacy of Islamic modernist movement, some criticized his reflections. Essentially three major critiques have been made to legacy of Afghani.

Firstly, Mümtaz'er Türköne argues that Afghani wrongly became a legendary figure. According to Türköne, Islamic communities in Turkey exaggerated the importance of Afghani. For example, Afghani's social and political ideas were presented as preliminary ones, although it could have been observed in the movement of New Ottomanism (1991). Secondly, Alaeddin Yalçinkaya accused him of not only being Janus-faced, but multi-faced due to his confidential activities and relations with masonic communities (1991: 88). Critique of Yalçinkaya is not only pervasive in his argument, but also in Islamic and non-Islamic scholars. Yet, the relations with Masonic groups is commonly explained as a need of the reach political goals, in order words, Afghani instrumentally had a relations with different religious or non-religious groups for his social and political aims. Finally, M. Muhammed Hüseyin agglomerated all accusations on Afghani in his critique: close relations with Jewish and Christian people, accusing him of responsible for assassinating the Shah of Iran, confidential character of *el-urvetu'l-vuska* and his activities (2004). Besides, one objection to these critiques would be that Afghani and his ideas have prevailed in the reformation movement in Islam, and in positive or negative point of view, he achieved to evoke modernist approach in Muslim world which molded the form and method of subsequent reform idea and contributed to its prolongation.

As it was mentioned before Muhammad Abduh (1849 – 1905) was a student of Afghani, whereas his intellectual contribution to modernist approach stemmed from his experiences in the process of education, which was not as salient as in Afghani. Plainly, the motive behind his emphasis on education lies on his personal experiences. Before his personal experiences in education, it should be noted that the era he had lived strongly influenced Abduh's background, for in that epoch positive sciences were conceived as a savior by Western thought and in this regard religion was being attacked (İşcan 1998: 171).

We can divide his educational experiences into three periods. First, he learned *tasavvuf* in madrasah where Sheikh Derviş Hızır played a key role

in not only in shaping Abduh's *tasavvuf* training, but also in his intellectual maturation, since Sheikh Derviş Hızır's method of education was not bound by rules and pedestals. Additionally, his experiences in Tanta and following in el-Ezher, Muhammad Abduh became aware of inoperative character of old traditional educational system which he frequently emphasized for the need of reform in this area (İşcan 1998: 18-22; Ramazan 2005: 132). Second part is concerned with private mentoring by Afghani. Fundamental issues might be summed up here as demonstrating the reform program of Muhammad Abduh: discontinuing of the education method in madrasah, independency in thinking, uncertainty of judgment, openness of expression and importance of positive sciences, such as mathematic, astronomy and philosophy. Finally the third one is about his own personal training until his death. He conceived importance of learning foreign language and started to study on French when he was forty-four years old (Karaman 2007: 66-67).

Abduh points out that reform is inevitable for salvation of Islam, and the method ought to be used in this reform movement is based on denying the imitation, providing the ascendancy of the reason, reconciliation Islam with positive sciences, and finally returning to *salafiyyah* epoch that does not mean to dwell in previous periods, rather it implies returning the initial roots of civilization (İşcan 1998: 361).

As it can be concluded from his stress on the educational reform, according to Muhammad Abduh's analysis social sphere is predominant to political area; furthermore education stands in the first and the most important place, unlike in Afghani who pays attention to political aims more saliently than social one.

The road of educational reform is a long one, but it is the only way of creating responsible and conscious people who could at least constitute rights for molding public opinion (Ramazan 2005: 133) to commence reformation. His presentation of the method of reform in Islam goes further that Islam is not only not incompatible with reason but is the only religion which religiously calls upon people to use his own reason and investigate nature (Rahman 1966: 217). This notion of investigating nature with an aim

of proving the God and its appearing by means of positive sciences is needed to be elaborated due to its central position in the hypothesis of this work.

Islam does not only show its coherence with reason, but also stresses that the religion of Islam is the only one which calls for people using their reason and investigate the nature (İşcan 1998: 154). Accordingly, Abduh underlines sciences as a mean of discerning the adjectives of the God, that is the science of the God surrounds everything could be known, otherwise the reason acquire more comprehensive rationality than God's, which is impossible (1986: 96). In other words, what Muhammad Abduh points out here by establishing the method which aimed to prove existence of God is highlighting the theophany character of investigations regarding the nature.

Abduh gives an example of harmony of the stars in order to strengthen his argument: links and stationary condition between stars, and the rule which provide the exact position and movement of them prove the virtue of the God. If not, the order of the world would be disrupted and the same condition is valid for the whole universe (1986: 97). More precise example on this account is given by İsmail Kara. In one section of the Qur'an, namely the sura of *fil*, the story that tells about demolishing the Ebrehe army by mysterious stones associated with germs of flower and pox disease by Muhammad Abduh, which is an attempt to explain genies as germs (1998: 58).

The notion of order and controlling by the virtue of the God affected the intellectual comprehensions in modernist Islamic tradition, particularly in Turkey. Bediüzzaman Said Nursi's contribution and analysis is very crucial to understand and conceive the method of modernizing in Islam in Turkey. The case of Bediüzzaman Said Nursi is elaborated in the next part in terms of the attempting to prove existence of the God via consulting methods of positivism.

In the case of Muhammad Abduh, understanding the cognition of the nature could pave the way for analyzing his heritage. He acknowledges the mechanic nature understanding as a dynamic for development of the

Western positive sciences; nevertheless he intends to change it for the means of reconciling science with Islam. For him, the nature is not a mechanism that works by its own body, but the machine of the God (İşcan 1998: 183). Therefore, the basis of this order in the world cannot be explained as a coincidence, hence the roots of all those aspects unquestioningly is the God (Abduh 1986: 98).

One could assert that one of the most remarkable contribution to intellectual sphere by Muhammad Abduh was developing the faith of *tevhid* (tawheed in English, it refers to divine unity). He believed that every science should be based on a principle in substance (Abduh 1986: 71), which was an endeavor to develop an ethical philosophy based on the unity of God, that is to say aiming to put unity of God into the center of Islamic ethic (İşcan 1998: 93). In fact, the real meaning of *tevhid* is to believe the unity, nonequivalence and nonparty of God; also it is believed that God is free in deed of creating the universe, everything turns back and be inclined to God (Abduh 1986: 73). On the whole, according to İşcan, the belief of *tevhid* is practical fact alongside theological basis (1998: 359); and Muhammad Abduh considers freedom of human, serenity and equality of societies, scientific conscious, imitation, which is the most important threat, and obtaining the researching spirit as a unique foundation of theology (1998: 103).

As a general tendency in modernist approach, particularly in Afghani's formulation, the reason and the faith are not in conflict. Muhammad Abduh started his formulation with this acknowledgement and went into detail in accordance with educational reform, unlike Afghani who gave priority to political goals beforehand. For this reason, general aspect in Abduh's works is molded from the attitude of yielding precedence to ethical education, intellectual preparation, and moderationist and conservative standings, rather than the fundamentalist stance for the revolutionary changing (Karaman 2007: 71). Due to his major emphasis on the social sphere, İşcan claims that we should see him not as reformist of religion, but as social reformist who aimed to improve the religion of Islam by means of

innovative instruments (1998: 365) that refers mainly intellectual apparatuses, i.e. educational reform.

Standing on the social sphere in terms of intellectual aspect, his life as a whole could be pictured as that he has been labeled as a theorist who experienced by social movements, rather than a real actor sets his mind on reforms in the political arena (Ramazan 2005: 139). Thus, his period could be defined as fruitless which did not result in any social consequences in a palpable manner.

Summarizing the contributions of both Jamal-al-Din Afghani and Muhammad Abduh, Tarik Ramazan points out six subjects which might be deduced from their contributions: (1) Referencing to religious sources and the Islamic identity to oppose traditionalism, and applying the appraising methods of *salafiyyah* in order to be eligible for sociological context; (2) being faithful to Islamic sources, which based on the *ijtihad*, for the purpose of developing new thinking method that would provide new answers and interpretations in order to save reason from the threat of imitation; (3) whatever sect Muslims belong to, establishing the Islamic state of belonging with an aim to provide the unity of Islam; (4) mobilizing and educating the people by establishing religious identity and at the same time regulating the political participation via extending social movements; (5) improving and institutionalizing the concept of *shura*, which is the principle of mutual consultation, for encouraging the people to participate in elections and public affairs; (6) whatever character it has –political, economic, educational or cultural in general– resisting the foreign occupation enforced by Western powers (Ramazan 2005: 141).

As to Muhammad Rashid Rida, his personal experiences are mainly based on his educational period as previous scholars'. Although his early education consisted of traditional Islamic subjects, the following school he passed i.e. *el-Medresetu'l-vataniyyetu'l -islamiyye* was established and administered by El-Cisr. The fundamental reason of passing *el-Medresetu'l-vataniyyetu'l -islamiyye* was the purposes of Rida's teacher, El-Cisr whose aim was adjusting and developing the Muslim community by benefiting

from positive sciences as effective as they occurred in the Western level. In addition, Rashid Rida acknowledges the Western positive sciences as world sciences, which gives a clue for understanding the importance of positive sciences in his analysis.

His training under the supervision of El-Cisr significantly shaped his program of reform which placed in a central position to identify his activities. It could be expressed that Rashid Rida suffered from being fluctuating between two affairs: traditional scholar prototype and modern educated intellectuality. The main reason of suffering between these two patterns would be ascertain of Western approach only by means of translated works due to not speaking any Western language (Kavak 2007: 22). Prior to the intellectual contribution, it should be accentuated that his journey to Egypt, where he published the journal of *Menâr* with Muhammad Abduh in 1899, marks a watershed owing to relative freedom in press life alongside benefiting the experiences of Muhammad Abduh (Kavak 2007: 5). After acquaintance with the thoughts of Afghani and Abduh by mean of *el-urvetu'l-vuska*, his personal and intellectual point of view significantly was impressed.

Rashid Rida constantly highlights the necessity of the educational reform in uniting the Muslim societies as following the path of Muhammad Abduh. The project of *Cem'iyyetül'l-ilm ve'l-irşâd* (community of science and guidance) was introduced by himself as the first aim of his road (Rıza 2007b: 158). Although it lasted just two years, establishing the school named *Dârü'l-İlm ve'l-İrşâd* aimed to educate both in religious and positive sciences (Karaman 2007: 154-155), which shows how consequential efforts he made unlike M. Abduh. Another point needed to be emphasized for demonstrating the importance and efficiency of *Cem'iyyetu'd-da've ve'l-irşad* is that two prominent scholars included to its charter member: İzmirli İsmail Hakkı Bey and Ahmed Naim Babanzade Bey (Rıza 2007b: 164). Addition to his educational effort, two articles of regulations of the school clearly summarize the major aims of the *Cem'iyyetu'd-da've ve'l-irşad*: (Article 2) the aim of this community is to give an education of religious

and positive sciences as a body. In this field, books will be compiled and the school named *Dârü'l-İlm ve'l-İrşâd* will be established in Istanbul. (Article 3) This community will not be interested in both internal and external policies of the state; however it will support *kanun-i esasi* (constitution) (Rıza 2007b: 165).

In the case of imitation, Rashid Rida was as strict as Afghani and Abduh. In a general manner, imitation in the modernist approach in Islam was seen as a main threat which would result in disruption in the Muslim societies. Yet the issue of imitation in Rashid Rida's argument is different from Afghani and Abduh's critique; because what he meant about imitation was not imitating the Western values as a whole, rather it was imitating the religious sciences through the agencies of *salafiyyah* (Riza 2007a: 281-292). He goes further that the Prophet Muhammad brought a book which provided precise evidences and signs that points the right way, and prohibited imitation and being seized with emotions (Riza 2007a: 218). As it could be seen, Rashid Rida stresses the issue of imitation from the different point of view. Certainly he opposed to imitation of Western positive sciences without any effort to harmonize them in the Islamic societies, however his primary goal was to analyze imitation in terms of religious affairs.

Ascribing to *salafiyyah* epoch has been very common in modernist approach as well. However referencing to *salafiyyah* is not concerned with chronological existence, rather evaluates current issues or problems in accordance with utilizing the methods which used to take into consideration in *salafiyyah* period of Islam. Outset point of Rashid Rida's analysis with regard to *salafiyyah* epoch might be pointed out as acknowledging the decline of the Islamic states in various dimensions: political, economic, cultural and religious. Indeed he asserted that it was unquestionable the Muslim community was the most miserable one in his epoch (2007a: 229); and expecting for occurring of the Mahdi to make Muslim people conscious of Islamic faith was the most fatal and atrocious disease which pervaded in Muslim societies (2007a: 233). Accordingly, returning to *salafiyyah* period of Islam in terms of expecting of the Mahdi is useless and even dangerous

conception in Islam. What Rashid Rida proposes is that current problems which occurred in modern times could not be solved by only utilizing the modern tools; in fact the Muslims need to combine both the methods of *salafiyyah* epoch and consequences of modernism in order to retain unity of Islam within conditions of modernity.

In political area, Rashid Rida frequently accents the unity of Islam as a unique aim for salvation in Islam. Separations appeared in sects of Islam spurred Rida for constructing the political theory or approach which could maintain the unity of Islam in the political sphere. Rashid Rida recommends a way of development in Islam by only means of returning the primary sources: Qur'an and Hadith. None of the Islamic sects could object to predominance character of primary sources, hence the unity of Islam would be derived from this principle (Rıza 2007b: 173).

In the context of political stance in Turkey, Rashid Rida initially supported the Committee of Union and Progress (*İttihat ve Terakki Cemiyeti*) and its activities, yet afterwards, he withdrew his support due to nationalistic tendencies of the Committee, which were briefly Turkist propagandas of the newspapers, raising the hostility of Arabs, and Turkifying the Qur'an and the everyday language (Rıza 2007b: 156). Ergo, we could see the importance of religious identity in Rida and excluding himself from the nationalistic movements for the sake of unity of Islam.

To sum up, it would be fair to say that Rashid Rida perpetuated the modernist approach in Islam after Jamal-al-Din Afghani and Muhammad Abduh. The former generally emphasized the political activities and a sort of haste reform, but the latter gave priority to educational reforms in a long run. I interpret Rashid Rida's efforts as politically the continuation of Afghani whose approach could be observed as being more fundamentalist, and as a social actor as more practical version of Muhammad Abduh due to substantiating the educational reform based on accommodating of positive sciences with Islamic ones, although it was ephemeral. In the next chapter, I try to examine the contributions of Bediüzzaman Said Nursi and Mehmet Akif Ersoy in accordance with the legacy of modernist Islamic approach;

yet in order to fill the need of conceiving the ground for an interaction between Western thought and Turkish intellectuals, I touch upon Young Ottoman thought and Ziya Gökalp first.

2. INFLUENCES OF POSITIVISM IN TURKEY: INTERACTION BETWEEN SCIENCE AND RELIGION

Confrontation with Western values in Turkey resembles to experiences of modernist Islamic scholars; Afghani, Abduh and Rida. Origins of the confrontation with the Western systems trace back to educational reforms, literary movements and political organizations. However, prior to elaborating multidimensional experiences, it is needed to touch upon the initial relations with the West.

The perception of the West has been conceived as a complex phenomenon since its emergence in Ottoman Empire during the eighteenth century in which officers who worked in foreign affairs in European countries, particularly in France, had a decisive role in reforms owing to their experience of facing with Western lifestyle and relatively ascendant prospect of the West. In Ottoman Empire, relations with the West might be defined as ambivalence relationship that has been caused by an effort of dividing the values of the West between infrastructure and superstructure. In the Turkish context, while the infrastructure addresses technology and science, the superstructure implies European lifestyle, i.e. culture in general. Şerif Mardin claims that the perception of the idea of the West is mainly considered as superstructural values of the West that is to say the *Frenk* lifestyle (2007a: 238). Additionally, Ahmet Çiğdem underlines similarities of dividing the idea of the West into the science, technology and industry and mentality in various levels not only in Turkey, but also in Japan, Russia and Iran (2004: 68-69). Distinction between wholesale adaptation and partial adaptation to the West occurred in this dividing attempt, which has shaped the intellectual argument throughout the reformation period.

The idea of the West has permeated into Turkey with reforms which consisted of multi-directional ways, such as military, educational and administrative. Due to limit of this paper, I do not lay stress upon military and administrative levels, although it might be claimed that different dimensions of reform had been vital.

The relationship between Turkey and the West has ambivalent character as I mentioned (see Erozan 2009). Bifurcation into society regarding the religious, cultural and traditional values on the one hand; and wholesale adaptation process (both infrastructure and superstructure) which was accelerated in Republican period on the other hand. In other words, a fundamental difference of Westernization from the ideologies of Ottomanism, Islamism and Turkism is based on the idea that social and political altering depends on rupturing, rather than continuity (Toker & Tekin 2004: 83).

In the case reflections of positivism, positivist oriented intellectuals in Turkey aimed at two basic goals. Firstly, their political motive was to maintain the Ottoman Empire, that is to say salvation of the Empire, which might be argued as predominant mainstream of the whole reformation period not only in positivist intellectuals but also in other approaches as well. As regard to socio-political area, analysis of Auguste Comte has a considerable point that suggests transformation of the society towards the “new” system (Comte 1998: 50). From this consideration, it could be argued that the same apprehensions were well-founded in Ottoman Empire as well. And secondly, reform in educational system in accordance with positivist thought played an essential role not only in Turkish reformation periods, but also in other Islamic states as I examined in the previous chapter. In this respect, I try to associate prominent Ottoman intellectuals who were affected by the Western thought with areas which featured in pervading positivist thought in Ottoman Empire. So, this chapter aims to examine two essential points: How influences of Western thought occurred in Turkey, especially in educational system and literature, and what were the responses

of Islamic intellectuals to Western “advanced” systems or specifically positive philosophy, i.e. positivism.

2.1. Young Ottomans: Between the “old” Islamic and the “new” Western Values

Initial origins of the Young Ottoman thought appeared in 1865. Basically, Young Ottoman thought did not consist of intellectuals who were in favor of the same goals. In this regard, Cemil Koçak points out that it is not possible to mention Young Ottomans as a group which were politically and ideologically coherent and has implicitly predetermined goals for pursuing the political power (2003a: 72). Thus, prominent characters of the movement that are İbrahim Şinasi, Namık Kemal and Ali Suavi¹ had different opinions and conceptualizations. However, in fact, critique of the modernity, which was conceived as outcome of the *Tanzimat* period, might be argued as a common denominator of the Young Ottomans who criticized the perception of the modernity in Turkey rather than the idea of modernity (Koçak 2003a: 77).

Relations of the Young Ottomans with tradition and modernity mark a watershed in comprehending the principles of the movement. On the one hand, they were attentive to tradition in order to retain cultural values; on the other hand, they seek the way of associating the cultural values with consequences or means of modernization movement. Şerif Mardin’s argument is very critical in this context. Mardin points out that the general idea of social change in Turkey –from *Tanzimat* period until today– is that when the “new” comes, the “old” ought to be eliminated from the knowledge store. Hence, Mardin discusses that the social imaginations could not work by resetting, although the “new” ones come with it. So, the “new” can only be involved in social change when it emerges from the “old” values. Young Ottomans were aware of this perception and the “old” one subsisted in their theory as “latently” (2003: 42).

¹ Although Ziya Paşa played a main role in the movement with others, I do not examine his contribution due basically to limit of the study.

The main argument of the Young Ottoman thought appears in an effort to response to consequences of the second generation of the *Tanzimat* Period. Thus, they did not oppose the *Tanzimat* movement entirely as they did not resist to modernization movement. Their critique was on the implementations of the second generation of the *Tanzimat* period, in which Âli and Fuad Paşa have played an essential role. Mainly what second generation of the reformation period had done was approaching concessively to the Western civilization, centralization in administration, and educational reforms that aimed to import Western systems without any adjustment in conformity with the cultural values (Mardin 2003: 43). In detail, Young Ottoman thought objected three basic issues which were implemented by Âli and Fuad Paşa: (1) Âli and Fuad Paşa as pioneers of the *Tanzimat* movement after Mustafa Reşit Paşa, indeed, applied the reformation as offset of the cameralism. Providing the “excessive” freedom to the subjects of the Empire was out of question; for, the basic goal was salvation of the Empire. In contrast, Young Ottomans sought the freedom and they thought that this aim could only be reached by establishing constitution based parliamentary system. (2) For Young Ottomans, *Islahat Fermanı* (edict of reform in 1856) resulted in minority problems and economic imperialism, which drove the empire at the edge of the disintegration. (3) Finally, Young Ottomans accused Âli and Fuad Paşa for importing the Western culture without any adjustment. For this reason, they aimed to establish democratic understanding based on the *şeriat* (the Sharia in English) (Mardin 2007a: 86-87). In this context, *şeriat*, which fulfills the political desiderata of the religious law, addresses to cultural base of the theory. Thus, cultural values of the Turkish society predominantly refer to Islamic ones. Basically, what they aimed was to fill the ethical gap in society, which was consequence of the “import” based Westernization, with Islamic philosophy. The rest of this part, I try to examine contributions of İbrahim Şinasi, Namık Kemal and Ali Suavi in accordance with adjusting the drawbacks of the society by providing Islamic philosophy.

In Turkish context, İbrahim Şinasi Efendi (1826-1871) who embraced rationalism by means of literature was a fundamental character due to being first intellectual who imported the discourse of the “new” as a whole. His experiences give a clue about his intellectual background and causation of adopting positivism by means of literature. Şinasi encountered positivist intellectuals, Ernest Renan and Emilè Littré, in Paris where he went there in 1849 under the aegis of Mustafa Reşit Paşa (Akşin 2002: 312) who was known as a father of the *Tanzimat* period (Koçak 2003a: 77). Significant point of view of Şinasi emerges in his proposition that is concerned with the effort of reconciling science with Islam. He claims that the basis of the civilization is the reason, i.e. intelligence; and consequences of religion and reason are equal or oneness; however the only difference between them is the difference of their teller (Korlaelçi 2003: 215; 2004: 37). Addition to prominence of Şinasi, he emphasizes collectivity of individuals apart from being a subject, which had not been revealed before him in the Ottoman Empire (Mardin 2003: 44).

He devoted most of his energies to publishing. In articles published by him in the newspapers of *Tercüman-ı Ahlval* and *Tasvir-i Efkar*, Şinasi defended synthesis of the East and the West that was controlled by the reason; and by his prominent play, named *Şair Evlenmesi*, he took the initiative role of spreading literature into the society (J. Parla 2003: 225) through simplifying the language.

In Şinasi we could observe the efficiency of the literature or more specifically usage of the journals and newspapers in disseminating the “new” ideas that derived from the Western civilization. In addition to Western influences in literature, two fundamental journals, named *Servet-i Fünun* and *Ulum-u İktisadiye ve İctimaiye* had a crucial importance in understanding the penetration of the Western values into the intellectual life in Ottoman Empire, particularly positivism.

Servet-i Fünun (1891-1942) (Wealth of Sciences) could be seen as the palpable outcome of the positivist influence in literature. *Servet-i Fünun* represents a modernist approach which is intensively formed by positivist

philosophy and its cores in literature. Exemplarily, some positivist philosophers who were introduced to Ottoman society in issues of *Servet-i Fünun* would expose the Western influence: Ernest Renan, Émile Zola, and Guy de Maupassant (Korlaelçi 2003: 216). Additionally, *Servet-i Fünun* could not be defined as a journal, which is generally assumed. As Tefvik Çavdar points out that the idioms of liberal thought, that is to say “science and art”, are needed to be used in order to define it appropriately (1982: 190). As it can be seen the role of the journal of *Servet-i Fünun* significantly sustained the movement of Westernization by means of literary works.

Another journal, *Ulum-u İktisadiye ve İçtimaiye* (The Journal of Economic and Social Sciences) was founded by Ahmet Şuayb, Rıza Tefvik and Mehmet Cavit who are known as positivist intellectuals in Ottoman Empire. *Ulum-u İktisadiye ve İçtimaiye* played a fundamental role in flourishing the positivist thought or specifically thoughts of Auguste Comte and La Play in Ottoman Empire (Toprak 2003: 310). It could be stated that *Ulum-u İktisadiye ve İçtimaiye* undertook the function of *Servet-i Fünun* after 1908, and lasted continuously until the twenty-seventh issue in 1911, except the month when 31 March Incident happened (Çavdar 1982: 190). In general, according to intellectuals who were assembled around the journal of *Ulum-u İktisadiye ve İçtimaiye*, pursuing the methods that applied in advanced civilizations (the West), which provided progress, is indistinguishable from the development movement in industrial and economic areas.

In addition, *Servet-i Fünun* and *Ulum-u İktisadiye ve İçtimaiye*, journals of *İçtimaiyat* (1917) (Sociology) and *Mecmua-i Fünûn* (1862) (Journal of Sciences) should be mentioned in this context. While the former studied positivism in terms of sociology, which is known as the first journal of this area (Korlaelçi 2003: 216), the latter focused on the superiority of modern science and it always took care to disguise criticism of religion as an assault on superstition (Hanioglu 2008: 94).

Ali Suavi (1838-1878) has a profound importance in examination of the Young Ottoman movement. He taught in *rüştiye*² where he graduated from and at the same time he endeavored to preserve his religious identity. Both confronting the Western educational system and struggling to retain religious values demonstrate engaging with the “old” and the “new” systems in Ali Suavi’s consideration as it occurs in Young Ottoman thought in a general sense. In this regard, it could be argued that Ali Suavi pursued two basic goals. On the one hand, he aimed to accommodate Western systems with Ottoman institutions for the sake of development; and on the other hand, he strictly adhered to Islamic values. Thus, examining the contribution of Ali Suavi presumably demonstrates bifurcate character of his intellectual framework. In this regard, Ali Suavi was introduced as “Islamic agitator” in German newspaper in 1867. His critical articles on the government published in the newspaper named *muhbir* in which Suavi’s “mannered Islamic” and populist version of the “rough” Turkish language appeared, although İbrahim Şinasi’s simplification efforts (Mardin 2003: 47-8).

Due to the disagreement into the movement for salvation formula of the Empire, suggestions of the Young Ottoman intellectuals differ from one to another as it was mentioned before. Ali Suavi was the strangest character within the Young Ottoman intellectuals. His distinctive characteristics were affinity to the people and effort to develop the theory and the right of resistance (Koçak 2003a: 73). Dissimilarity of Ali Suavi’s formulation appeared in comparison with the others whose basically conservative theories were. Probably due to the fact that he was commoner and had the nerve to do, he denoted a revolution and resistance based on ordinary people (Koçak 2003a: 77), which distinguishes his contribution from others.

Overall, it appears that Ali Suavi’s formulation consists of two essential issues. The first one is concerned with relations with the Western civilization. On account of confronting the Western educational system in

² Şerif Mardin observes the *rüştiye* (new secondary schools, between the primary and higher education), which was established in 1838, as a success in *Tanzimat* period owing to contemporary education which revived new topics, e.g. mathematics and geography (1993: 272).

his early educational experience, Ali Suavi emphasized the importance of the “new” values. The second issue is about his intimate relations with the religious values. For that reason, we could observe the main characteristic endeavor of the Young Ottoman generation in Ali Suavi’s contribution, which is establishing the theory that attempts to accommodate Western values with Islamic ones.

Finally, Namık Kemal’s (1840-1888) contribution seems more serious and comprehensive one that distinguishes him from the other intellectuals among Young Ottomans. Basically, what he attempted was synthesizing the material values of the West and the cultural essences of the Turkish society by means of developing political and philosophical theory. His intellectual contribution which was affected by the Western philosophers (John Locke, Thomas Hobbes, Jean-Jacques Rousseau and Montesquieu) has crucial importance in the Young Ottoman movement; because his efforts to conceptualize the ideas of culture and Ottomanism. Mainly, his effort is concerned with associating the Western methodology with Islamic model. In other words, he aimed at establishing Westernized political philosophy based on Islamic foundations in Turkey (Koçak 2003a: 73), or intended to prove that Western political theory substantially was not exclusive of Islamic political philosophy (Koçak 2003b: 248). Thus, Namık Kemal positioned the religion in his theory of reform as an indisputably major role.

Another significant character of Namık Kemal relies on his emphasize of concept of *vatan* (homeland) in his theory. Even though his approach to nationalism was quite remote, distinction between the concept of homeland and nationalism was not precise. Namık Kemal was aware of that dissemination of the nationalism would engender disintegration of the Ottoman Empire. Accordingly, nationalism he defended was not Turkism. What he defended as nationalism could be defined unusually as Ottoman nationalism. Namely, whatever subject to be belonged (Turk, Arab, Greek, Armenian, et cetera), as long as they live in the territory of the Ottoman Empire, they would adhere to the idea of Ottoman nationalism. Enthusiasm of nationalism would channel to this ideal of Ottomanism. However, the

general logic of the idea of nationalism is that it could not be combined with its opponents. Thus, Namık Kemal occasionally inclined to demeanor which utterly exhibited defense of nationalism. At the end of this life, he understood that Ottoman nationalism was a hopeless idea and therefore he tended to *İslamcılık* (Akşin 1980: 160-1). As it can be observed not only in Namık Kemal, but also in other Young Ottomans, the intellectual character swung back and forth between the West and the East, that is to say religion and civilization, like pendulum.

One more issue should be examined before concluding this part. A group of *ulema*³ supported the movement of Young Ottomans in that period. At first sight, it could be seen contradictory. However, two reasons might explain this contradictory situation. First one; it might have been seen sympathetic to this people due to adhering to the religious tradition in the movement; and secondly, criticizing the previous legacy of the *Tanzimat* period might have created common interests. In addition to this argument, Şerif Mardin discusses that obtaining a support from *ulema* is not astonishing for the Young Ottoman movement. In order to understand the base that produced this support, it is necessary to comprehend *Nakşibendi* Order which put into action as a populist and proto-democrat movement in Middle East and Asia (2003: 47).

To sum up, Young Ottomans oscillated between various elements, such as Ottoman, Turk, Islam and Muslim. The reason of fluctuating between those elements might be an effort to combine them for establishing the theory that rejects “rough” import based Westernization and clings to traditional Islamic values. Beside differences among Şinasi, Namık Kemal and Ali Suavi, three issues could be pointed out as their mutual characteristics: (1) Principally, they involved in modernization process that begun before them. Yet, they agreed with partially rejecting the legacy of previous process. (2) Modernization process should be revised in order to abstain from previous faults and exaggeration. (3) Reform movement should

³ Ulema refers to the educated class or body of Muslim doctors of sacred law and theology.

be re-adjusted and re-defined in a “right” way as accordance with current cultural and social characteristics by avoiding imitation (Koçak 2003a: 73). To put it another way, they came to a mutual understanding to obtain materialistic power of the West, while preserving the cultural religious values.

From this perspective, the contribution of Ziya Gökalp clarifies the idea of dividing the perception of the West into cultural and scientific areas. He also affected the Republican Period that paves the way of understanding the penetration of dividing attempts into further arguemtns.

2.2. Ziya Gökalp: Distinction Between Culture and Civilization

Against this background, I examine Ziya Gökalp (1876 – 1924) who influenced intellectual life with regard to understand influences of positivist thought in late Ottoman Empire and even in Republican period. Ziya Gökalp was born in Diyarbakır (located in Southeastern Turkey) where he met with Dr. Abdullah Cevdet who had been there to disseminate the ideas of the Committee of Union and Progress (CUP). Dissident character of Ziya Gökalp assisted him for participating the ideas of Abdullah Cevdet, i.e. that of CUP. Later, he went Istanbul where he was registered for the veterinary school by members of the CUP (Korlaelçi 1986: 348). Needless to say that he participated in activities of the CUP at the same time. After quitting the school at the last semester, he was invited to teach sociology in Salonika in 1909 and gave lecturers at the university where he established the first Institute of Sociology that might be seemed as the most significant outcome of his efforts in terms of educational sphere (Korlaelçi 1986: 349). Another consequential tangible effort of Ziya Gökalp would be publishing the journal of sociology (*İçtimaiyat Mecmuası*) which lasted only six issues (April – September 1917).

Ziya Gökalp’s intellectual framework is different from other positivist intellectuals (Salih Zeki, Ahmed Şuayb, Hüseyin Cahit Yalçın and Rıza Tevfik) due to its affiliation with nationalistic and religious elements. Yet before that, it is needed to underline that Ziya Gökalp was influenced by Émile Durkheim’s positivism which stresses division of labor and the

concept of solidarity that was channeled to the idea of nationalism. Hence, I only dwell upon his thoughts on science and technology within his understanding of civilization.

As Taha Parla states that Gökalp's theory has three aspects. Firstly; Gökalp's political-social philosophy is social idealism; secondly, his general social theory is social solidarism; and finally, his political theory is populist democracy. This conceptual hierarchy within Gökalp's theory is consistent with his idealistic positivism (1985: 100). Substantially, what he aimed as synthesizing of idealism and positivism is that the one hand idealism was concerned with nationalism, which represented a cultural ideal and a philosophy of life which laid the basis for social solidarity, and Islam. And on the other hand, positivism was understood as a reason of developing of the Western civilization (T. Parla 1985: 25).

Conceiving the philosophical idealism in Gökalp's formulation paves the way for understanding his efforts. In this regard, Gökalp benefited from two sources to establish his philosophical idealism: Ideological positivism of Durkheim and egalitarian and radical democratic Rousseauian elements. The former is critical in comprehending the whole idea of Gökalp's theory. Durkheimian "ideological positivism" which adjusts liberalism as a holistic model based on the axiom of atomistic individualism. Moreover, the ideological positivist element in Gökalp as it would be observed in Durkheim originated from the notion of "order and progress" (T. Parla 1985: 101). The emphasis of the notion of "order and progress" is prevalent in positivist intellectuals in Turkey; because at the end of the nineteenth century, the primary goal was preventing disintegration of the Ottoman Empire. Similarly to other positivist intellectuals, the notion of the salvation of the Empire directed the political theory of Ziya Gökalp.

Notion of order and progress significantly influenced positivist tradition in Turkey. Fundamental reason of attaching to positivist idea might be that the positivist philosophy provides progress within order. Namely, the revolutionary movement would produce progress; but, the progress without order could not turn to a good purpose. Likewise the conservative

philosophies would lead order; yet, order without progress is inefficacious idea. Thus the positivist idea fits both the need of order and progress, which might be the main reason of attaching the positive philosophy during the controversies of disintegration of the Empire.

Westernism and modernism are two important concepts in Ziya Gökalp's consideration. As he said, his social-political theory was Turkist-Islamist-Westernist modernism, which demonstrates the complicated relations between those elements. As Taha Parla indicates that: "Westernism or modernism, which Gökalp used interchangeably, meant the scientific, technological, industrial achievements of European capitalism, which were to form part of his program of national revival" (1985: 26). Hence, one can observe a distinction between scientific or technological values of the Western civilization and cultural ones, which resulted in synthesis of Turkish nationalism, Islamic Sufism, and European corporatism; or to state the matter differently: distinction between "culture" (*hars*) and "civilization" (*medeniyet*) (T. Parla 1985: 27). Dividing the concept of the West is pervasive in M. Akif's theory. However, influences of Durkheim in Gökalp's theory crystallize a differentiation between Gökalp and Akif. While Ziya Gökalp was proposing a nationalism which underlies Turkism, M. Akif propounded nationalism based on Islam (Demirci 1986: 42).

Regarding the positivist intellectuals (Salih Zeki, Ahmed Şuayb, Hüseyin Cahit Yalçın and Rıza Tevfik), who were "pure" positivists, I argued that they were influenced by Auguste Comte's positivism even though some of them (Rıza Tevfik and Ahmed Şuayb) were not affected by Comte's positive philosophy directly. As to Ziya Gökalp, it would be seemed problematical to claim that he was influenced by Comte's positivism (prevalent in positivist intellectuals in Turkey) by method of Durkheim's consideration; because Ziya Gökalp inclined to nationalistic and religious spheres in order to make his theory plausible or applicable. A similar issue which should be pointed out here is that Gökalp also attempted to reconcile science with Islam as Şinasi did. He asserted that science and Islam are

complement and indistinguishable, and defects of the science could only be fixed by Islam (Korlaelçi 1986: 352-3).

At the end of this chapter, I aim to demonstrate how the fluctuation occurs between the scientific West and unethical or corrupted West by referring to Bediüzzaman Said Nursi and Mehmet Akif Ersoy, whose contributions are shaped around the argument of using the scientific values of the West in conformity with the religious conceptions or goals.

2.3. A History of Reconciling Science with Islam in Turkey: The Cases of M. Akif Ersoy and Bediüzzaman Said Nursi

M. Akif (1873 – 1936) was born in Fatih in Istanbul. His father Mehmet Tahir Efendi, who was instructor in *Fatih Medresesi*, encouraged him to go modern *Mülkiye İdadisi* (high school) after graduating from *Rüştiye*. After graduating from the *Mülkiye İdadisi* in 1893, M. Akif entered into *Mülkiye Baytar Mektebi* (the veterinary collage) (Ünsal 2005: 74) where he became aware of positive sciences and was affected by methods traced back to legacies of Jamal-al-Din Afghani and Muhammad Abduh (Demirci 1986: 10)⁴.

At the outset, identifying the current situation in Islam had been paid attention by M. Akif in order to constitute feasible program of reform particularly in education. So, the first goal would have been answering the question of why the religion of Islam stayed behind of the Western civilization in terms of cultivation of science and technology. M. Akif points out that owing to thought that religious affairs could be adjusted by imitation, for centuries, accumulations of superstitions and innovations, which is not based on the Qur'an or the Sunnah, produced disruption in practices of Islam (Ersoy 1997b: 467). For that reason, the religion of Islam

⁴ In a similar way, Muhammad Iqbal had studied both religious and positive sciences. He first studied religious sciences with T. W. Arnold in Lahore and finished his thesis, which was on progress of metaphysics in Iran, in Munich; afterwards he continued his researches on law in Cambridge where his intellectual character had been shaped by acquaintance with method of Western type of education (Ahmed 1990: 173). Bilateral education process –religious and positive sciences– produced the idea which claimed that science and religion were characteristically in complementary (Ramazan 2005: 176).

became the most ignorant community while it had been identified as religion of knowledge or wisdom in previous epochs (Ersoy 1997a: 477).

In his times, in social, economic and cultural spheres had been conceived as stationary in comparison with political area where many victories had been achieved –foundation of the Republic. For implementing the goals in those spheres, reform must have been taken into consideration, nevertheless the reform must not be based on material or form, but on spiritual and ethical issues in his thought (Vakkasoğlu 1983: 106). It seems that westernization policies in Turkey specifically in educational system disturbed M. Akif's intellectual views, for he was of opinion that building our own functional educational institutions was more applicable than trusting educational institutions based on foreign system (Ersoy 1997a: 493). Very similar identifying of current Islamic problems was made by Muhammad Iqbal whose argument was that: "During the last five hundred years religious thought in Islam has been practically stationary" (Iqbal 1977: 7). As it could be observed that the main point is addressed by Iqbal, who is defined as Akif of Pakistan (Akgündüz 1989: 45), and M. Akif is the practical field of Islam. Hence the reform program should consist of practical changes.

Firstly, it is needed to be examined of perception of the West in intellectual view of M. Akif, because the perception of the West had been divided into two spheres: scientific or technological one and cultural or spiritual one. M. Akif points out that the progress could only be achieved by acquiring scientific and technological basis of the West, and he furthers his argument that it is impossible to exist without those values (Ersoy 1997d: 431).

Distinction between cultural and technological values of the West is very strict in M. Akif: The former produces backwardness and disruption, and the latter leads to progress and development. As an example, he highlights the success of Japanese development in terms of benefitting from the Western progress that acquired only science and technology of the West and dismissed any attitude could produce disruption (Ersoy 1997d: 416). In other words with regard to relations with the West, cultural legacies of the

Islamic societies could not have resulted in disruption or corruption. What could have produced those conclusions can only be disengaging with “real” Islamic values that have never been against to science and technology, or development of reason in generally.

Importance of the perception of active society and the positive sciences can often be observed in writings of both M. Akif and M. Iqbal. Feasibility of the reform in Islamic societies relies on the idea of active society, rather than passive one which had affected Muslim World for centuries in a negative manner. M. Akif marks endeavor and deed as religious task in Islam (1997e: 406); and disregards theoretical efforts (1997d: 427-8). Similarly in M. Iqbal’s fundamental book named *The Reconstruction of Religious Thought in Islam* starts with remarking the practical character of the Qur’an: “The Qur’an is a book which emphasizes ‘deed’ rather than ‘idea’” (1977: IV); and he calls the Muslims for pursuing science wherever it is (1999: 80), even if it is in China (Ersoy 1997f: 440). For Iqbal, the West is active and dynamic, but selfish, tricky, disregardful and deprived from adoration and faith (Ahmed 1990: 179).

The method of reform is a key point in Islam as it would be observed in modernist approach as a whole. Ingenuity and virtue are two fundamental basis of reform in Akif’s point of view (Ersoy 1997f: 458). While former refers to science and technology in general, the latter consists of accommodating the values, which is acquired from other civilizations, with Muslim societies (Vakkasoğlu 1983: 107). In this regard, M. Akif appraises educational reform in the central position of his reform idea, because he follows the reform tradition of Muhammad Abduh who gives priority to educational reforms although its long term character over political aims.

As regards to moral basis, the reform idea of M. Akif does not trace back to material or formative spheres, rather he established the idea on the basis of spiritual and ethical dimensions, which capable of saving Muslim people (Topçu 1998: 46). Nevertheless the spiritual dimension of the reform idea stems from Qur’an which is the central source of inspiration for reform (Ersoy 1997f: 453). Beside internal sources of the reform idea, he denotes

acquisition of the Western values –confined to science and technology– as religious duty in Islam (1997g: 501).

As it is mentioned above, M. Akif pursues the reform method of Muhammad Abduh which relies on educational area aimed to adjust Muslim societies, rather than using political apparatuses to be active in political level. In this regard, M. Akif points out in *Asim* as following:

I want Reform too but like Abdu...
Otherwise not with descending Babıali, not with hanging the man
up
As a hector conspiracy with a blind tool
Retract your all friends from this act and you retract too.
Son, do not go around, creep a devious
If there's a chance, turn around to Europe tomorrow⁵. (Ersoy
1997f: 458)

As it can be inferred, M. Akif's educational reform program was established on the basis of Muhammad Abduh's which accepts educational spheres as transforming instrument in society in the long run. In Turkish context, M. Akif proposes to begin reformation movement in madrasah which was pictured by him as obstinate factor to requirements of the century (Ersoy 1997f: 435). He notes the vital importance of educational reform not only in this world, but also hereafter (Ersoy 1997h: 481), which denotes spiritual and divine aspect of his ideas.

Overall, it appears that the educational reform is the only instrument that is capable of adjusting the Muslim societies. Basically the reform relies on the idea of transforming the Muslim societies toward an active and dynamic way, which can only be implemented by educational reform that is long but perdurable method. Similarly, Muhammad Iqbal's educational reform program derives from the same motive. His contribution is briefly summarized by Fazlur Rahman as stating that: "Iqbal was looking for an educational system that would render the human personality not just "informed" but creative and dynamic" (1984: 56-57).

⁵ İnkılap istiyorum, ben de, fakat Abdu gibi... / Yoksa ellerde kör âlet efeler tertîbi, / Bâbiâli'leri basmak, adam asmakla değil. / Çek bu işten bütün ihvânını kendin de çekil. / Gezmeyin ortada, oğlum sokulun bir sapaya, / Varsa imkânı, yarın avdet edin Avrupa'ya.

To sum up, M. Akif divided the perception of the West into two dimensions. One dimension refers to science and technology of the West, which should be acquired by Muslims in unison with cultural values of Islam; and another dimension is concerned with the cultural values of the West from which Muslim people stay away. In a similar way, according to Muhammad Iqbal's formulation, the advantages of the West should not be reduced to scientific and technological developments; whereas he was conscious of positioning Islam toward those aims conformity with the Islamic values (Ramazan 2005: 177).

As to Bediüzzaman⁶ Said Nursi, he has been one of the most effective figures in Turkish social and political life via his product which is his collected writings named *Risale-i Nur* (The Epistle of Light) that is basically interpretation of the Qur'an as accommodating it with modern civilization and positive sciences (Sitembölükbaşı 1995: 116). Nevertheless, comprehending his era seems indispensable in order to conceive his efficiency.

We could start briefly by saying that the consequences of the *Tanzimat* period significantly assisted shaping Islamic movements occurred in the first half of the twentieth century in Turkey, especially in Bediüzzaman's contribution. Since *Tanzimat* proceeded to the first decade of the twentieth century which overlaps with Said Nursi's youth and early manhood.

Unidirectional reforms in educational system throughout *Tanzimat* period produced a need of responding to new Westernized institutions: a rift between new Westernized schools and the madrasah. Struggle between those two institutions was a prominent theme in Bediüzzaman's idea (Mardin 1989: 111).

What makes Bediüzzaman's contribution idiosyncratic is that he benefited from both negative and positive outcomes of the *Tanzimat*: one hand the growth of science turned out that it was unfeasible to create a social theory without utilizing positive sciences; and on the other hand a

⁶ The sobriquet of Bediüzzaman means nonpareil of the times.

conflict between traditional and modern institutions exposed requirement of adjusting religious apprehensions. Şerif Mardin points out that:

An informed reading of Bediüzzaman's arguments enables us to draw a somewhat fuller picture of the points at which Ottoman reform from 1839 onwards created cultural constraints for a large number of its subjects and established a foundation for his influence. (1989: 9)

The importance of the place or territory generally grips intellectual's formations. There is no exception in Bediüzzaman's social and political formation. The province named Bitlis where Bediüzzaman was born was a specific region in terms of the situation of the Eastern provinces in *Tanzimat* period. Standing apart from the central administration system, relatively less developed and the dominance of the religious network of sects (*tarikât*) were some basic characteristics of Eastern provinces, Bitlis in particular. In analysis of Şerif Mardin, there were at least four important developments which heavily marked the Eastern region throughout the nineteenth century and the educated or semi-educated Ottomans of the time who lived in the Eastern provinces of Anatolia: elimination of the local ruling dynasties, the activities of the Protestant missionaries, the spread of the *Nakşibendi* order and the involvement of Ottoman Armenians in separatist activities toward the end of the century (1989: 47). Furthermore, Mardin pointed out that the problems of the Eastern provinces of the Ottoman Empire was the success of the *Tanzimat* rather than its failure (1989: 30); and the spread of the *Nakşibendi* order played a key role in shaping Bediüzzaman's religious ideas owing to becoming a center of the *Müceddid-i Nakşibendi* (reviving) order in Bitlis (1993: 14). Briefly, leitmotif of the time when Bediüzzaman was born and matured contained a conflict between two thoughts: On the one hand, some believed in strictly adhering to traditional values; and on the other hand, some were more flexible about meeting the innovations of the *Tanzimat* period in the context of conjunction to modern world.

Educational orientation of Bediüzzaman is similar to other modernist scholars who have been examined in previous chapters: Jamal-al-Din Afghani, Muhammad Abduh and M. Rashid Rida. Their early educational

experiences consisted of acquiring positive sciences, which meaningfully molded their reform idea. Very similar inference could be derived from Bediüzzaman's educational experiences. At the end of the nineteenth century regarding the enhancing of publications on sciences, Said Nursi might have studied logarithms, the telephone, cosmography, industrial chemistry, geometry, the formation of universe, inorganic chemical analysis, nutrition, zoo-technology, natural history and physical anthropology (Mardin 1989:76). Besides, awareness of the positive sciences and its importance in the Western development could have given the form of his intellectual aspect. For instance, lately he defended the idea of each madrasah student should choose one specialization in the non-religious science that is to say positive sciences in their educational process (Mardin 1989: 90).

To sum up the historical conjuncture, it should be emphasized on the era he lived is that it overlapped four characteristic periods both politically and socially: the periods of reign of Abdülhamid II, the Committee of Union and Progress, Presidency of Atatürk and İnönü, and multi-party system. Each of those four periods produced their own intellectual figures and social and political mainstreams; however it could be suggested that Said Nursi and his significance were outcome of all those four periods.

The intellectual aspect of Said Nursi underlines the reaffirmation of the norms set by the Qur'an as reintroducing the traditional Muslim idiom of conduct and personal relations into the modern society (Mardin 1989: 13), and struggle against the inroads into the Muslim society, which was the thought of materialism in the West (Mardin 1989: 8). In fact, both have a close relationship of being derived from reflections of the modernity. First, he stresses the emphasis of Qur'an in terms of reason and secondly he proposed a limited connection with the Western civilization that based on scientific and technological spheres.

During his stay in Mardin, he met two theology students who sustained Afghani's reformation idea, which broadened his point of view in theological manner. In other words, his constant interest in educational

reform might have stemmed from those students' argument: Islamic and scientific poses are not in conflict (Mardin 1993: 178). Thus, Said Nursi believed that the regression of the Muslim World was traced back to failure of harmonizing two essences: substance and the spirit should be considered as two sides of the humankind. From this point of view, Said Nursi tried to re-analyze verses of the Qur'an by the light of modern thought and reconcile science with Islam (Sitembölükbaşı 1995: 118). Accordingly, Bediüzzaman underlines that the scientific knowledge is a gift from the God; for this reason we should utilize the scientific knowledge, rather being enslaved by it (Mardin 1993: 143).

In general terms, Said Nursi's efforts recall the contributions of Muhammad Abduh who affirms that everything in the past and the future exist in Qur'an (Kara 1998: 58). Said Nursi goes further by attempting to present the existence of basis for each progress and science in divinity (Nursi 1997b: 493); and for this aim, he frequently took up the processes of biology and botany as proofs of the creative force of divinity (Mardin 1989: 94) and consulted Qur'an as a basic text of the Islam (Nursi 1997b: 495).

Said Nursi's effort which aimed to prove that the Qur'an contains every scientific and technological development produced some interpretation rather than substance evidence. Those interpretations which are stated in *İşarâtu'l-icaz* are concerned with technological discoveries, e.g. communication technologies. Firstly, the discovery centrifuge machine which is a rapidly rotating device designed to separate liquids from solids was inspired from the baton of Prophet Moses which was stated in verse of *bakara* (Sitembölükbaşı 1995: 118). Secondly, according to the verse of *enbiya*, the fire did not harm Prophet Ibrahim, which shows that even the control of the fire is in hands of the God and it does not act arbitrarily (Nursi 1997b: 491-2). Third one is appearance of the throne of Belkîs in Sam even at that time it was situated in Yemen. People around the throne were not only seen but also being heard. For Said, this experience evokes inventions which provide to obtain voice and image from distance (Nursi 1997b: 488). Finally, the forth example is about communication technologies. In Qur'an,

the language of the birds is stated in the verse of *neml*, and according Said Nursi inventing telephone and phonograph was inspired by the language of the birds (Nursi 1997b: 490). Şerif Mardin interprets the approaching of Said Nursi to positive sciences which is aimed to elaborate the text of Qur'an as: "At times, Said Nursi's approach to science shows the imprint of what may be termed pre-positivistic conceptualizations" (1989: 203).

Beside his intellectual efforts to accommodate positive sciences with the basis of Qur'an and Islamic society, he proposed a university project to Sultan Abdülhamid II. His educational project named *Medresetü'z-Zehra* precisely originated from the idea of harmonizing Western positive sciences and Islamic sciences. Furthermore he aimed to solve the underdevelopment problem of Eastern provinces by this university project, yet the project fallen flat (Yavuz 2005: 265; Karabaşoğlu 2005: 270; Kara 1997b: 459; Ramazan 2005: 157). In addition to his educational reformative endeavors, Said Nursi emphasized putting the practical use of the positive sciences in educational process in his article published in the journal of *Volkan* in 25 March 1909 (Nursi 1997a: 464).

His political and social effectiveness relies on his writings; *Risale-i Nur*. In the period of Said Nursi, political and social pervading could only be achieved by underground activities, e.g. publishing. Certainly what I meant political and social pervading was concerned with religious spheres. For that reason, collected writings of Said Nursi had a critical importance to conceive his success.

Basically what *Risale-i Nur* succeeded was penetrating into the everyday life of Muslim people. Responses of religious thought to modernity were primary goal of Said Nursi, which produced such interpretation of the Qur'an that tried to answer every single problem in religious life. Nevertheless the success of *Risale-i Nur* could not be understood by only referencing Said Nursi's efforts. In fact, his followers played main role in accomplishing the task which was reaching to people who were partially disoriented by fundamental changes of *Tanzimat* and the Republican Period. Impetus of his activities accelerated especially after 1950 when his writings

were taken off the list of banned publications and reached 60 000 copies. On the number of copies of his books, Şerif Mardin states that: “60 000 copies of the various chapters of what was to become the *Risale-i Nur* were distributed. This figure is obviously exaggerated but this message was beginning to be heard in the surrounding area is clear” (1989:97).

Another point of his success was the circumstances of the adherents he reached. The most important hallmark of those people is fluctuating between traditional values and modern values, and the class they belong to: the middling level of rural and small-town population. In other words, they had difficulty in adhering to the modern secular society. Accordingly the need to mobilize Muslims as individuals and members of Islamic community, not as subjects of a political order (Mardin 1989: 102) was met by Bediüzzaman Said Nursi.

Influences of Said Nursi’s contribution saliently appeared in *Nurcu* movement or *Nurculuk* which is not terminologically a sect, but rather it is a community. As many community or sect, *Nurculuk* also based on the book, nevertheless the book is *Risale-i Nur* while commonly the central text of the Muslim sect or community is Qur’an, which is a distinguishable criterion for *Nurculuk* movement (Yavuz 2005: 264).

We could observe the practices of many ideas what Said Nursi aimed to implement. For instance, educational aspect of the community might be considered as main instrument to disseminating into the society. However such Islamic movements had had no chance to emanate educational institutions in Republican period until 1980s, for this reason the movement of *Nurculuk* used a kind of alternative public sphere that acts as a bridge between the state and individuals: private teaching institutions. An attempt to use private teaching institutions for disseminating into the society and creating a *Nurcu* Muslim prototype resulted in transferring the individual creed to social life (Yavuz 2005: 286).

1950s is not only crucial point for Said Nursi’s individual efforts, but also for *Nurcu* movement, too. As many religious movements occurred during 1950s on account of the advent of a multi-party government in that

period, it is a widely held belief that the *Nurcu* movement became the most prevalent in consequences of Said Nursi's dynamic and contentious personality (Sitembölükbaşı 1995: 110). Another aspect of achievement of the movement associated with the literacy by Şaban Sitembölükbaşı whose assertion was concerned with a positive correlation between increasing of literacy rate and successes of Islamic movements which based on the books: *Risale-i Nur* in *Nurculuk* and Qur'an in *Nakşibendi* order (1995: 132)

The social success of the *Nurculuk* movement relies on conferring an intellectual map to those who fluctuate between tradition and modern values. Education is the primary tool and the fundamental idea in intellectual background of education is that nothing acts as arbitrarily and everything is a part of the master plan; in this sense physics and metaphysics are complement each other (Yavuz 2005: 281).

During the last quarter of the twentieth century, journals have accelerated the impetus of effectiveness of the community. Those journals mainly positioned themselves in scientific character, which increased scientific publications in biology, astronomy, medicine, chemistry, and so on (Ramazan 2005: 162). Additionally, *Nurculuk* gain considerable number of professors whose claim is involved with accommodating endeavor of the nature with the power of the God in terms of creating the universe.

There is one more aspect which differentiates the *Nurcu* movement from other Islamic communities or sects, which is about participation of the women into the community. Traditional role of the women in the Islamic communities might be defined as passive. Şerif Mardin points out the position of the women in the *Nurculuk* as following:

An important aspect of *Nurculuk* (membership in the faith movement) is that just as men gather every week to discuss passages from the *Risale-i Nur*, a number of women's gathering are also convened for similar discussions. This parallel structure is not reflected in the leadership, which is all male. (1989: 24)

Activeness of the women in such an Islamic community has not been common in Turkey or in any Muslim state due to subsidiary position of women in the Islamic tradition. In this sense success of the *Nurcu*

movement could not only be related to active individual perception, but also providing the relatively active role to women in movement.

As a consequence, the question of which factors played role instrumentally in recruitment to *Nurculuk* could be answered as referencing to two factors: Providing social status through membership of the community and religious education integrated with positive sciences. The former has addressed those who had been fluctuated between tradition and modernity, and the latter has been the principal instrument in the modernist approach in Islam specifically in terms of the effects of positivism in Islamic culture, such as in Afghani, Abduh and Rida.

It would be appropriate to end this part with a quotation from Şerif Mardin, which could be interpreted as the origin or starting point of this work of studying Islamic journals that had been publishing in Turkey after 1980s:

Regardless of his view of nature as a machine, Said still considered the laws of nature to be appearances which heralded the presence of the real, i.e., the Godhead. Nature as a theophany of God and its study by science thus acquired a sacred quality. In the long run, this sacralization of science has resulted in a series of popularizations of science of a very high level published by the *nurcu* at their printing in Istanbul. The publications are devoid of propaganda and have such titles as “Cybernetics,” “The Big Bang,” “The Blood and Circulation,” “Space and the World,” “Energy and Life,” “From the Cell to Man,” or “The Air Around Us.” The works are produced by reputable scientists, some with positions in the university, or by journalists who are careful to give a scientific account of the process they are studying. Only at the end is a theological point put forth: such extraordinarily involved but regular processes can only attest to the presence of a Maker, God. (1989: 216)

In the next and the final part of this chapter, I aim to make a bridge between theoretical legacies which I have discussed for far and examination of Islamic journals that consist of the body of this dissertation.

2.4. From the Theoretical Legacies to the Islamic Journals

Basically, the reason of elaborating the modernist approach in Islam and the roots of positivist philosophy in Turkey relies on the need of constituting

the common ground for interaction between the West and the East. For this reason, the modernist approach was examined by referring to the legacies of Jamal-al-Din Afghani, Muhahmmad Abduh and Muhammad Rashid Rida in the first chapter.

Basically, it appears that modernist approach in Islam has different dimensions to deal with, but the most important subject is the method of constituting a relationship with the Western civilization or the idea of the West which is conceived as an advanced society in consequence of its scientific and technological developments. Most of the modernist Islamic scholars begin their discussions with educational reform program on account of the usage and pervading of positive science could only start from reform which aims to change the educational system toward Western educational system. In this sense, contributions of Jamal-al-Din Afghani, Muhammad Abduh and Muhammad Rashid Rida have played a critical role in Muslim world and especially in Turkey.

In order to conceive the whole idea of contributions of Jamal-al-Din Afghani, Muhammad Abduh and Muhammad Rashid Rida, identifying the comprehensiveness of Rashid Rida paved the way for understanding the whole approach. I claimed that Rashid Rida's efforts as politically the continuation of Afghani whose approach could be observed to be more fundamentalist, and as a social actor as more practical version of Muhammad Abduh. On the political side, modernist approach was fed by the existence of the colonizer West in East; on the social side it emphasized the need of educational reform in the long run for revitalizing the Muslim world. In this respect, although the contributions of Abduh formed the idea, efforts of Rida was also crucial due to substantiating the educational reform based on accommodating of positive sciences with Islamic ones, although it was ephemeral.

The aim of the second chapter was to seek for a common ground of interaction between the West and Turkey. I only touched upon the legacy of the Young Ottomans and Ziya Gökalp due to their relations with Islamic or traditional values. The former is the best example in revealing the

ambivalence character of the relations with the West. What made the legacies of Young Ottomans and Ziya Gökalp idiosyncratic was that they, as a whole, did not agree with any formula for salvation of the Empire. Thus, different proposals engendered different theories which were fluctuated between the “new” values of the Western civilization and the “old” values of the given culture, i.e., Islamic values. On the other hand, the latter stresses the thought of Ziya Gökalp whose social-political theory was Turkist-Islamist-Westernist modernism, which demonstrates the complicated relations between the West and Islam.

Narrowing the topic in this perspective facilitated to establish the discussion of Bediüzzaman Said Nursi and Mehmet Akif Ersoy. The application of positive sciences to the educational process identifies their argument adequately. It is also the case in re-shaping the Islamic discourse especially after 1970s in Turkey. Already, Islamic journals frequently consulted the ideas of Bediüzzaman Said Nursi and M. Akif Ersoy in arguments on science, ethic and the West.

The contribution of the first two chapters to the examination the Islamic journals addresses two fundamental issues. The first one is the importance of education in revitalizing efforts of Islam. Even though we saw the prepotent stress of the political sphere in Afghani, the general tendency is on educational reform which could only be achieved in a long term. The second one is the literary source based dissemination of an idea. Both in Afghani, Abduh and Rida and in reform movements in *Tanzimat* period in Ottoman Empire; journals, newspapers and brochures facilitated the reform movements. Thus, literacy marks a watershed in regard of literary based dissemination efforts of ideas.

What is critical in the aim of this study is that relations between Islam, which is concerned with the modernist approach fostered by Afghani, Abduh and Rida, and positivism. Therefore, the general conception of positivist thought is significant in order to conceive a relation between those thoughts. The positivist philosophy is generally known as it's excluding character of the metaphysical conceptions. It could be observed in Comte's

argument and even the logical positivist approach which emphasized the significance of the language in eliminating of the metaphysic as well (Carnap 1966). However in Turkey, especially after 1970s, positivist discourse penetrated into the Islamic discourse, which could be observed in Islamic journals: *Zafer*, *Sur*, *Sızıntı* and *Altınoluk*.

In those journals, it is possible to observe the usage of the positivist methods, i.e. observation and experiment, for the sake of proving religious goals that are shaped around strengthening the religious faith, proving the existence of God by observing the nature and disseminating the religion of Islam. Prima facie using the positivist methods in Islamic journals would seem controversial; however the intellectual backgrounds of the Islamic discourses could unravel it.

Intellectual backgrounds of these journals base on the legacies of modernist approach in Islamic tradition. Yet, the lion's share in this approach consists of Bediüzzaman Said Nursi's formulations. Footprints of Afghani, Abduh, Rida, and M. Akif could be found in those journals in various ways, however their philosophical foundations base on Bediüzzaman's consideration which is concerned with application of the positive sciences in religious issues. The last note for further examination, in order to hinder repetitions of the common issues in examination of the journals, I examine them topic based rather than one by one.

The last issue before elaborating the Islamic journals would be questioning the leap from the early twentieth century to the 1980s when Islamic journals proliferated. Briefly, it might be stated that the Islamic communities had not found an open space for disseminating the religious ideas in Turkish social and political life until the late 1970s and the early 1980s. In this period, economic development in Islamic circles led to the proliferation of literary sources and this progress reflected mostly the Islamic journals and magazines, and another reason is that the influences of positive sciences in Islamic journals appeared in this period.

3. ISLAMIC JOURNALS: SUR, ZAFER, SIZINTI AND ALTINOLUK

3.1. General View of the Islamic Journals

In this section of the study, I try to elaborate Islamic journals which are imbued with positivist methodology: *Sur*, *Zafer*, *Sızıntı* and *Altınoluk*. Three comprehensive topics generate the basic theme of this chapter in connection with the argument of the paper: The perception of the science in the religion of Islam, observation of the nature with and aim to pursue the theophany, and the use of science in technology and health issues. Before examination of three topics, it is needed to touch upon the general view of the journals regarding their origins and development processes, which constitutes this part of the third chapter.

At the outset, it is worth pointing out that the journals of *Sur*, *Zafer* and *Sızıntı* have connections with *Nurculuk* community and the other journal named *Altınoluk* has with *Nakşibendilik* somehow. However one cannot state that their audiences bound up with their communities. Need to state that the distinction between *Nurculuk* and *Nakşibendilik* is not the one which consists of two opposite sides. One could state that *Nurculuk* is the offshoot of the *Nakşibendi* order, yet differences between them have crystallized thus far. Although differences between *Altınoluk* and *Zafer*, *Sur* and *Sızıntı* have become clear, similarities rely on their approaches to the science, or particularly the positive sciences. By way of explanation, the use of positivist methodology is not pervasive in *Altınoluk* as prevalent as it is in *Sur*, *Zafer* and *Sızıntı*. But, in the context of philosophy of science and relations between science and religion, their discussions refer similar considerations.

The importance of the journals for examination of the positivist influences in Islamic discourse is contingent upon widespread usage or utilization of the written sources. Generally in Islamic tradition, consultations and interpretations depend on the basic text of the Islam, i.e. Qur'an. Nevertheless in the Turkish context, the Qur'an is not the only source in consulting for social and religious issues. The main text of consultation for social and religious issues in *Nurculuk* is Bediüzzaman Said Nursi's product which is his collected writings named *Risale-i Nur* (The Epistle of Light) that is basically interpretation of the Qur'an as accommodating it with modern civilization and positive sciences. Thus, literacy is prerequisite in *Nurculuk* in order to interpret everyday life by the light of the *Risale-i Nur*. Thus, text based approach in Islam in Turkey resulted in producing literary materials: books, journals, newspapers, and so on. This situation has led proliferation of these sources since 1980s. According to the research which was done in 1993 (Atikkan), newspapers and journals that defined themselves in the Islamic movement were around six hundred, which demonstrate the prevalent use of the text based sources in forming the Islamic discourses in Turkey. Basically, what I attempt is to exhibit the use of positivist methodology in Islamic journals in which a number of Islamic intellectuals are beginning to highlight the harmony that prevails in the physical universe; both astronomy and modern biology that provides evidences for theophany in the nature.

The first journal to examine is *Sur* which entered publication life in January 1976. At the beginning, the journal of *Sur* is planned to publish quarterly, but after the second issue which was published in April it turned to a monthly journal. Description of the journal at the front cover used to be "a journal of literary, culture and art" that changed after the second issue as "scientific, literary and political journal". So, it has taken a stand of scientific label since its second issue in a definitional manner.

Center of the editorial office is in Istanbul and the owner of the journal is the Türdav Publishing Corporation. The director of the journal has been Ömer Okçu who has been writing his articles under the pseudonym of

Hekimoğlu İsmail. Beside Hekimoğlu İsmail, H. Hüseyin Korkmaz and Ahmet Vural have been main characters –as being director, head of the editorial office and owner of the journal from time to time– in molding the role of *Sur* in Turkish social, religious and political life.

Yet, the importance of Hekimoğlu İsmail is critical due to shouldering the responsibilities of publishing the journal since its emergence. He proclaimed at the interview in 1995 that he used twelve pseudonyms in order to fill pages in *Sur* in early life of the journal, such as Ömer Okçu, Hekimoğlu İsmail, Haluk Tunç, Özdemir Baltık, Hulusi Dağlı, Fahri Kazankaya, Yıldırım Dere, Kaya Yörük, Veli Karabey, and Hedley Cant. He legitimized using even the foreign name by saying that “Our people trust foreign people more than trusting themselves” (İsmail 1995a: 45). Throughout the 1980s and 1990s, benefiting the ideas of foreign intellectuals, who were mostly Western renowned people tergiversated to Islam, had directed the main arguments in *Sur*.

The meaning of *Sur* is a rampart of the fortress. Hekimoğlu İsmail states that “the *Sur* surrounds the fortress and we are the soldiers of this fortress to fight against ignorance, ineptitude, deviousness and laziness” (1995: 45). From this quotation, we can conclude that the basic goal of the Islamic group which gathered around *Sur* was to fight against backwardness, particularly in social life in Turkey; and the ammunition for this struggle is publishing journals. The journals indeed have not been the only instrument in this perception. Beside journals, several books and brochures on various topics have been assisting for combating the underdevelopment issues in Turkey in terms of religious perspective. Number of books published by Türdav, except the journal of *Sur*, was around twenty-four in April 1977. It increased to over forty after 1984; and today Türdav Publishing Group consists of Cihan, Elit Kültür, Sarıpatya, Sevgi and Karanfil publishing firms, which gives hints about comprehensiveness of *Sur* in literary life today. Nevertheless, the archive of *Sur* is not available on the Internet, which demonstrates its drawback in comparison with other Islamic journals.

The main topics in *Sur* have altered after 1990s. Before that period, *Sur* had aimed to notify facts of religious faith by means of positive sciences; and it focused on generally the way of using the positive sciences in accordance with strengthen the religious faith, proving the existence of God and disseminating the religion of Islam. They had searched the miracles of Islam underneath of every stone, such as in pages of “technological developments”, “atoms are speaking”, “language of germs”, “fruits of faith and science”, “equitation and us”, “human and mechanics”, “science and knowledge” and “the earth we live in” in 1980s.

At the end of the 1980s and early 1990s, the main theme of *Sur* altered toward social and political spheres rather than adhering to scientific area. Ruşen Çakır explains the reason of shifting from scientific area to more social and political current issues, such as Gulf War, European Community, Islamic ethic and the perception of the West as addressing to inability to compete with symbolism of other *Nurcu* journals; *Zafer* and *Sızıntı*. Nevertheless it is impossible to deduce that *Sur* entirely discontinued speculative scientism. Especially after mid 1990s, *Sur* started to lay hands on physiology instead of old-fashioned sciences like physics, chemistry and biology (1991: 113).

Secondly, the journal of *Zafer*, which means victory, has been publishing since January 1977 as a monthly journal. Its editorial center is in Sakarya⁷ (head office moved to Istanbul after 2004) and the owner of *Zafer* has been, in turn, Sakarya Youth Organization (Nihat Nalbaltoğlu), Sakarya Education Foundation (Cavit Pay), and Zafer Publication Corporation (Ergün Ür). As its owner has changed, description of the journal has changed up to the present time from “Monthly journal of thought” to “Journal of scientific research”. *Zafer* has been publishing other literary materials beside journal as we observed in *Sur* as well. Number of books on was twenty-two in 1987 and it reached forty-two in 1988. In present time,

⁷ Sakarya is city located on the coast of Black Sea in Southern Marmara Region, where religious and nationalistic tendencies are relatively distinctive.

Zafer Publication Corporation publishes books on religion, computer science, law, juvenile, physiology, sports, philosophy, and several fields.

The journal of *Zafer* entered to publication life as modest as it could have been. Low quality of paper, colorlessness and limited pages could explain the circumstances while it was first being published. However the conditions in Sakarya and Turkey changed in favor of both audiences and publishers after 1980s. While selling rate was enhancing, quality of the paper turned to alluring and colorful one, and the audiences went beyond comprising mostly high school students. After 2004, the total page of *Zafer* reached to sixty and it became a competitive actor in publishing life in terms of its area. Nevertheless, limited archive which contains journal of *Zafer* only after 2000 could be reachable on the Internet, which shows relatively disadvantage of it. When it is compared with *Altınoluk* and *Sızıntı*, it is seen as disadvantage –both for *Sur* and *Zafer*; yet when it is compared with other journals in Turkey, we cannot say that it is a drawback.

The main theme of *Zafer* has not changed thoroughly since it was founded in 1977. Ruşen Çakır defines the main theme of *Zafer* in 1991 as “facts of Islamic faith” (114). Indeed, the topics in *Zafer* underpins the definition of Çakır, such as “Window to sciences” in 1977, articles on bionics in 1979, highly concentrated science papers: on atmosphere, ants, gravity, physics, and chemistry during 1980, “Electronic world” in 1981, “Science and Technology” and arguments of evolution in 1983, and after mid 1990s metaphysical subjects added to the main arguments in *Zafer* beside maintaining the “pure” scientific ones.

Third journal is *Sızıntı* which has been publishing since February 1979. Although the name of the journal means a leakage, it refers a fountain which is also the name of the English journal (The Fountain) published by the same group located in New Jersey with offices in Istanbul, Moscow, Cairo, Sydney and Kuala Lumpur. Description of *Sızıntı* was first “Monthly journal of science, literary and ethic”, and it turned to “Monthly journal of science and culture” in 1995.

As *Zafer* entered its publishing life in Sakarya and moved its head office to Istanbul, *Sızıntı* started to be published in Izmir which is relatively secularist city located in Western part of the Aegean Region. The publisher of *Sızıntı* is Işık Publishing Incorporated Trade Company and its owner is M. Talat Katırcıoğlu. It consists of fifty-two pages today and the size of pages was expanded in 2000. As to access to archive on the Internet, *Sızıntı* presents whole archive on the Internet and even voice records of articles (after March 2005) are reachable for blind people, which is very exceptional quality in Turkish publishing life.

The main theme of *Sızıntı* is similar to those of *Zafer* and *Sur*: The importance of positive sciences in strengthening the religious faith in Islam. The articles fill the pages of *Sızıntı* with regard to the main theme are science, technology, medical, biology, botanic, astronomy, geology, physics, chemistry, ecology, history, literature, sociology, physiology and philosophy of science. In spite of the fact that the main themes of *Altınoluk* and *Sur* shifted to social and political areas after late 1980s and early 1990s, we cannot observe similar shifting in *Zafer* and *Sızıntı*. On the contrary, they benefited the gap engendered by *Sur* and *Altınoluk*, and focused on intensively “pure” positive sciences beside physiology and alternative medical issues.

In March 2006, Prof. Dr. Arif Sarsılmaz evaluated the journey of *Sızıntı* from 1979 to 2006. He classified the topics examined in *Sızıntı* into eight headlines: (1) Articles on positive sciences, such as biology, physics and astronomy, which refute the coincidence and highlight the importance of Creator in regularity, complexity and diversity of the nature. (2) Arcitles those show that verses of Qur’an are not in contradiction with current sciences. (3) Articles on historical characters who were deliberately introduced as bad people, in fact they besteded the development in Muslim world. (4) Articles on renowned people in literature or intellectual life, who move away from religious faith because of lacking of faith and education. (5) Articles on unraveling the “Dark” Middle Ages at which Muslim world prevailed in science and technology. (6) Articles those unveil the coherence

of religious duties and kernels, such as obligatory alms, fast, azan, mosques, mausoleum, neighborhood and self-devotion. (7) Articles which introduce experiences of people who voluntarily work in abroad for educational purposes. (8) Finally, evaluating the reader comments and suggestions in series of “Damlalar” (drops in English) (Sarsılmaz 2006: 92-3). As it can be concluded from classification, *Sızıntı* touch upon many aspects of social life, particularly the importance of positive science and application of its methodology in conformity with Islamic issues.

The aim of *Sızıntı* is to prove a harmony in nature and universe which is being controlled by the God. For this goal, the use of positive sciences has vital importance in terms of its comprehensiveness. It might have been thought after 1980s that examining “pure” religious issues would not support strengthening the religious faith in Turkish society. Thus, the method, which should be used in journals, must address not only religious people, but also those who adhered to reality of positive sciences and has distance to religious values. This argument could explain the reason of publishing *Sızıntı* firstly in one of the most secularist city in Turkey, too.

Finally the last journal is *Altınoluk* which has been publishing since March 1986 that is relatively late compared to other three Islamic journals. The head office of *Altınoluk* is in Istanbul and the owner of it is Abdullah Sert as the head of the Erkam Publishing Incorporated Company. The editor of *Altınoluk* had been R. Fatih Uğurlu from March 1986 to March 1988. Since then the editor has become Ahmet Taşgetiren who is the most fundamental character of *Altınoluk* regarding directing the main themes and arguments in it. Even though the total number of the page was 48 at the beginning, which was high number as it is compared to other three journals at the beginning, it reached 60 pages in the present time. The access to its archive on the Internet is available for all issues as it is in *Sızıntı*.

Altınoluk analyzes basically three relations: Islam and human, Islam and Muslims and Islam and society. Accordingly, the main theme and topics of the several discussions are formed around those three relations, such as “able to remain Muslim”, “religious faith and life”, clarifying the identity in

accordance with Qur'an", "to more alive religious life" and "to live within Islam". Interviews generate the great deal of the arguments in *Altınoluk*, which is usually done by Sadık Dana in pages of *The Talk of the Month*. Beside Ahmet Taşgetiren and Sadık Dana, prominence authors in the journal are Fahreddin Yıldız, Osman Nûri Topbaş, İsmail Seydioğlu, İsmail Lütfi Çakan, Mustafa Eriş, M. Sami Ramazanoğlu and Ümit Şimşek.

Although the main themes of *Altınoluk* do not fit with the basic argument of this work, secondary issues and pages or series concerned with technology and science and philosophy of science resemble to the proposition of other three journals in terms of strengthening the religious faith by using the positive science or basically by the reason. In other words, *Altınoluk* does not use the methodology of positive sciences (observation and experiment) in its pages as it is used in *Sur*, *Zafer* and *Sızıntı*, what it does is suggesting to apply positive science to religious conceptions.

Prior to continuing the examination of *Altınoluk*, it is necessary to touch upon *Zafer*, *Sur* and *Sızıntı* again in order to conceive the role of *Altınoluk* appropriately. Generally, it could be stated that the journals of *Zafer*, *Sur* and *Sızıntı* are inclined to *Nurcu* community in which the emphasis of positive sciences in religious considerations is pervasive. What underpin this argument are prevalent consultation of Bediüzzaman Said Nursi's interpretations and allocating several pages and series on his contribution. On many occasions, the approach of Bediüzzaman Said Nursi is presented as the "right" and principal way of interpretation of Qur'an that aim to reconcile science with Islam by explaining the religious values from the mind of elaborating positive sciences. Specifically in mid 1990s, *Sur* published many articles on Bediüzzaman Said Nursi in accordance with his ideas about science, education and politics. In addition, as I mentioned before, their audiences do not only consist of the members or sympathizers of *Nurcu* community, but also those who deliberately identify themselves away from any sort of Islamic community or group.

The Islamic group *Altınoluk* belongs and the audiences are different from other three journals as the main theme and discussed subjects are as well.

The religious community *Altinoluk* belongs is *Erenköy Cemaati* (Erenköy Religious Community) which is a part of *Nakşibendi* order⁸. Nevertheless, the differences between *Nurcu* community and *Nakşibendi* order are not strict as it was mentioned before. However the notions of *Nakşibendi* order is frequently placed in articles in *Altinoluk*. Correspondingly, while articles related to Said Nursi and *Nurculuk* are not more than ten, articles on *Nakşibendi* order and its importance are above sixty in journal of *Altinoluk* since its emergence.

Consequently, difference between journals of *Zafer*, *Sur* and *Sızıntı* and journal of *Altinoluk* are based on differences of methodology. On the one hand, *Zafer*, *Sur* and *Sızıntı* aim to explain the facts of religious faith by deforming methods, discourse and technique of modernism with Islamic motifs. In short, they consult positive sciences for reconciling since with Islam. On the other hand, *Altinoluk* poetically addresses to hearts and conscience of people in discipline of *Tasavvuf* rather than elaborating the positive science to prove religious facts as *Nurcu* journals do (Çakır 1991: 59).

3.2. The Perception of the Science in Islam

In this part of the work, firstly I examine the perception of science in Islam. Four comprehensive questions take shape the main theme of this part: (1) What does science mean in Islam, (2) for what reason it ought to be used, (3) what does the Qur'an say about it, (4) and finally what are the limits of science in terms of religious perspective? Secondly, I touch upon Islamic scholars whose contributions emphasized the main arguments in journals of *Zafer*, *Sur*, *Sızıntı* and *Altinoluk*. Actually, there are many scholars need to be remark on, but I only consider contributions of Bediüzzaman Said Nursi, M. Akif Ersoy and Muhammad Iqbal in accord with the theoretical section of the study.

⁸ *Nakşibendi* order is the biggest order among religious orders in Turkey, which was established by Hoca Bahau'd-din Nakşibend in the ninth century (Hilmi & Aksun 2006: 190).

The starting point of science and scientific research relies on questioning six basic issues: what, how, why, who, where and when (Akad 2005). However, the positive science only examine the questions of what, how, who, where and when. Elimination of question of why in science would be based on abstaining from metaphysical considerations; thus from religious perspective, science is incapable of researching the question of why, while it is able to give coherent and reliable answers to questions of what and how. In *Sızıntı*, Nazif Baki Akad interprets incapability of science in examining the question of why as lacking of wisdom which could be interpreted as religious wisdom in modern science (2005).

More specifically, from the religious point of view, the world consists of two separate dimensions or conceptions which are the physical world and the metaphysical world. While the former is referring to tangible assets, which could be perceived by the five senses, i.e. sight, hearing, touch, smell and taste, and has become a matter of positive sciences; the latter addresses to feelings and emotions that are divested of scientific research due to the inviability of observation and experiment. From the general perspective of positive science, only material elements that could be observed and experienced are a matter of science. The metaphysical area could not be a matter of positive science due to imperceptibility. According to the modernist Islamic approach, eliminating the metaphysical area by examining only the material facts tabooed the science itself. Hence, the science is not objective anymore as it is prevalently assumed (Nazlı 2007).

Nevertheless, Islamic scholars consider those distinguished spheres as complement and indistinguishable conceptions (Akkan 1984: 40; Akyüz 1995, 1997). In this regard, Ali Köse furthers the argument in *Sur* in 1986 by claiming that the religion comprises both physical and metaphysical area while the science covers only the former (1986: 32), which means superiority of religious conceptions to scientific one. Similarly, Ali Rıza Demircan asserts in *Altunoluk* that believing the existence and delusion of demons is incidental to the common considerations of Islam (1987: 6).

Consequently, considerations on physical and metaphysical areas in Islam rely on the acceptance of metaphysical area.

In point of acknowledging both physical and metaphysical spheres, to be a “pure” scientist is not sufficient to be a “good” person from Islamic perspective. The “right” scientist should take into consideration metaphysical issues beside physical ones. In other words, the “right” scientist should be both religious and scientist at the same time (see Tabanlı 2006) in order to utilize positive sciences in a “right” way which aims to strengthen religious faith and prove the theophany. Inseparable character of physical and metaphysical area identifies the perception of science in Islam. Indeed the religious perspective should contain the metaphysical area in essence; yet substantiating the metaphysical area and religious facts by means of positive sciences is distinctive characteristic of modernist Islamic approach in Turkey.

Another aspect related to science in Islam is that science and Islam is not in conflict unlike in Christianity. Polat Has explains non-conflict situation in Islam in *Sızıntı* by reference to four basic issues quoted from C. Kırca. Firstly, the Islamic reason is emancipated for taking into account material facts and metaphysical conceptions as it is stated in most Hadith and verses of Qur’an. Secondly, the religion of Islam characteristically provides flexibility in thought, but preserve its purity via standing firm. Thirdly, Islamic tradition oppose to clergy, which produce the conflict between science and religion as it occurred in Christianity owing to refusing any authority between God and people. And finally, Islam associated with various cultures and belief systems rather than abstaining from interaction, which led to scientific development in early period in Islam (Has 1987 qtd. in Kırca 1981: 100).

Namely, the Islamic perception of science essentially depends on metaphysical conceptions which would lead scientific researches or considerations to proving existence of God. So, from religious point of view there are two possible consequences in the future: whether the science will contain spiritual conceptions or it will be annihilated (Truan 1989). In order

words, as Sinan Bengisu pointed out that the science would lead people to God if it is a “real” science (1977b: 11) which avoid materialism, dogmatism, scholasticism, and determinism (Karatekeli 2009: 16). In addition, the basic arguments of journals ordinarily related to scientists, prophets or respectabilities in order to underpin the claim which is to recast the functionality of science. For instance, contributions of Prophet Moses, Ebu'l-Leys es-Semerkindî, Al-Ghazali, Resûlü Ekrem, Ahmed Er-Rufai, Ebû Zer, Prophet Ali, Ebû Said, Ahmad Sirhindi, and Abdul-Qadir Gilani (see Ramazanoğlu 2002: 30; Dâna 1991a: 24, 1991b: 24, 1991c: 24) mostly fill the pages in this regard beside Hadith and verses of Qur'an.

The second question is that for what reason the science ought to be used. In a general sense, science must not be for science itself. It must turn to good purpose for people and aim to improve people's conditions of life (Atıfoğlu 1997: 53). According to the Islamic thought, current positive sciences corrupt ethical concerns of our life and alienate most of the people from religious faith in present time.

The method to response this drawback of positive science is to reply to those problems again with positive sciences (Cemil 2006: 55). In other words, the method of preserving and arousing the religious faith which is under attack by positive sciences is again benefiting the positive science in a “positive” way. Shortly, the main thought in Islam alleges that the arguments on existence of God has belonged to philosophy so far, but according to the latest developments in positive sciences, particularly physics, biology and chemistry, metaphysical conceptions which are related to the concept of theophany could be proved, and thus consolidate the religious faith.

Positive sciences should also be used for exploring the latent beauties in nature or universe. The concept of theophany, which refers to appearance of God, is very crucial in that respect due to pursuing it in every detail in nature. This subject is examined in the third part of this chapter; but in relations with perception of science in Islam, it is worth pointing out here that the general idea of positive sciences in the Islamic journals is basically

concerned with instrumental utilization of means of sciences –observation and experiment– for searching the regularity and order in nature which is believed to control by God (see Sencer 1989: 8; Bozkurt 2003: 37; Zarifoğlu 1986: 14).

Every scientific research intends to unravel questions. Yet, every answer exposes more questions, even though it ought to diminish obscurity. In modernist Islamic approach, exposing more questions and problems is related to diversity and complexity of life or nature which is controlled by the Creator. Hence, observation and experiment, which are the basic apparatus of scientific methodology, would lead proving the existence of God (Serdar Yıldırım 2008: 16). Essentially, the goals and consequences of science should be repairing, establishing and unraveling the hearth, reason and soul (Çengel 2008b).

The perception of science or the reason in general sense in Islam mostly relies on the emphasis of reason and science in Qur'an. Indeed we cannot find any chapter in Qur'an devoted to scientific subjects due to the fact that the Qur'an is not a scientific text. But, what is interpreted as miraculous in Islam is that Qur'an conspicuously mentions current discoveries (Baldık 2007). According to Islamic considerations, Qur'an indicates atom, neutron, television, electricity, plane and similar inventions. Beside, miracles bestowed to prophets assisted the inventions that is stated in Qur'an as well, such as teleportation, flight, train, bus, nuclear bomb, and smelting iron (Döğen 1995a: 7). We have seen similar considerations in Bediüzzaman Said Nursi's interpretations, which are stated in *İşarâtu'l-icaz*, that are mostly concerned with technological discoveries, for instance communication technologies.

Suat Yıldırım's articles published in *Altınoluk* and *Sızıntı* would pave the way for conceiving the conception of science in Islam regarding the emphasis of it in Qur'an. He firstly claims that Qur'an indicates every stage occurred during big bang (1992: 38), and Bona Fide science could only be commentary of Qur'an (1979). And secondly, he attempted to classify scientific discoveries indicated in Qur'an: (1) Astronomy: creation and

roundness of the world, lights of sun and moon, expansion of universe and pressure of atmosphere. (2) Geology and geography: balance and stability on earth, rain and winds. And other discoveries are (3) mysteries of bees and animals, (4) electricity, (5) fingerprint, (6) and transportation vehicles (1987a; 1987b).

Finally the last question is what are the limits of science in terms of religious perspective? Initially, it is widely believed that researchable sphere of science confined to material facts which could be observed and experienced. However in religious perspective, the world consists of not only material one, but also metaphysical area which is not comprised by positive sciences. Thus, the positive sciences are incapable of explaining the universe as a whole due basically to its limit to tangible assets. For example, according to Mustafa Uluçay, the science cannot explain telepathy and evil eye (1981: 40) on account of confining only to physical area.

The science is incapable of explaining the metaphysical conceptions, because it depends on only observation and experiment which are concerned as the most reliable methods in acquisition of knowledge (Çengel 2008a). However, from a religious perspective, observation and experiment are not unquestioningly credible methods. Illusion and misconception are two main examples for underpinning the argument of the untrustworthiness of observation and experiment (Ziyaoğlu 1979: 11-3).

Unreliableness of methods of positive science also appears in health issues which is the main topic of fifth part of this section. Nevertheless, it is not unfair to say in terms of limits of science that solutions produced for health problems are not conceived as fully trustable in Islamic approach. Many times it is stated that the “real” cure for diseases is not the medicine produced by science but it is the God’s order or the obligations of religion (Oktay 1982: 42-3). Very crucial example of solving the health issues by religious suggestions appeared in the article published in *Sur* in 1994. The article named “Where is my doctor?” discusses rehabilitating the stress disease. From the beginning of the article to the last paragraph, it explains condition of stress with fully scientific explanations and suggests again

scientific solutions. Nevertheless, in the last phrase, it recommends praying for the recovery in the case of the scientific methods did not produce the treatment ('Doktorum Nerede?' 1994: 54).

The last issue about limits of science occurs in the critique of relying upon technological inventions. The starting point of critique is the same: metaphysical assets cannot be distinguished from physical ones and the physical one has its limits. Most of the time comparison between human-made inventions and God-made creatures produced comparison between computer and human brain. In articles published in *Sur* and *Zafer*, Robert Jastrow in *Zafer* (1983: 32) and Levent Ünal in *Sur* (1980: 9), assert that a computer is incapable of judging and thinking. It is can only act as it is programmed. However the human brain is able to do more things than computer, e.g. judging, which distinguish human brain from computer. Comparison between human brain and computer resulted in sanctifying the God's power over creating the humankind that shows the limits of science as well.

Consequently, in Islamic considerations of the journals examined here, the science begins with possibilities and continues with possibilities, too. Thus, the science does not produce definiteness. Whatever science produces, such as progress or development in technology, it is not able to lead prosperity and happiness. It is frequently seen in journals that the only method of achieving revivalism in Islam is strengthening religious faith and utilizing positive sciences in accordance with religious aims.

The second subject of this part is inspired Islamic scholars whose ideas shape the theoretical arguments in those Islamic journals. As I mentioned in previous part, journals of *Zafer*, *Sur* and *Sızıntı* have a connection with *Nurculuk* community, thus the most inspiring scholar in those journals is accordingly Bediüzzaman Said Nursi. As to *Altınoluk*, the emphasis of Bediüzzaman is not apparent in this journal. Nevertheless, the contributions of Mehmet Akif Ersoy and Muhammad Iqbal form a common ground for all four journals. Since examining the contribution of Bediüzzaman Said Nursi

and Mehmet Akif Ersoy in the second chapter in detail, I do not elaborate their effort in here.

In short, what inspire or reveal the approach of those Islamic journals are basically methodological ideas of Bediüzzaman Said Nursi. According to him, positive sciences have vital importance in strengthen the religious faith and development, which molded the main methodological discussions in those articles: benefiting positive sciences in accordance with religious faith, or essentially for Islamic revival. *Risale-i Nur* (The Epistle of Light), which is the collected works of Bediüzzaman Said Nursi, is considered as treasures of sciences (Döğen 1995b: 32), aimed to reconcile science with Islam by suggesting every Muslim people for training both religious sciences and positive sciences in their educational process (Kırkinci 1996: 26). *Risale-i Nur* touches on various subjects regarding the social and religious life, but the most significant issues are methods of sciences and how to look upon reason, philosophy, science, sinfulness, materialism, positivism and naturalism (Karataş 2007). Consequently what Bediüzzaman Said Nursi points out that the positive science could only be meaningful and useful when it is integrated to Islamic values or goals (Arslan 2004).

The last issue is contributions of Mehmet Akif Ersoy and Muhammad Iqbal. M. Akif presented solutions for response to problems of his times as a triaxial proposition: faith, conscience and science (Dönmez 2004). This triaxial solution could not only response to problems, but also paves the way for understanding and reviving the religion of Islam. Namely, we observe similar suggestions in Akif's formulation that aimed to revive Islam. The article published in *Zafer* in 1981 points out the phrases Akif likes. One of these phrases summarizes the aim of science in Akif's consideration: "being afraid of God could only be possible through science" (Ersoy 1981: 19).

On many occasions, comparison between characteristics and contributions of M. Akif and Muhammad Iqbal appear in those journals (see Akgündüz 1989: 44-5; Arıkanlı 2007). The goal of comparison might be exemplifying the religious scholars who also pay attention to positive sciences in education in other Islam countries (it is Pakistan in this context).

For this reason, articles on comparison of those two scholars refer to poetship, morality, and their suggestions on the role of science in Islamic education.

3.3. Observing the Nature: Pursuing the Theophany

This part of the third chapter is composed of the basic use of scientific methodology in religious affairs; and specifically it focuses on the concept of theophany through observing the nature. At the outset, it could be claimed that the methodology used in journals of *Zafer*, *Sur* and *Sızıntı* is practically the same methodology used in positive sciences. However, *Altınoluk* does not use the scientific methodology, because it does not have a goal to strengthen religious faith or proving the existence of God by elaborating positive sciences. What it intends is basically addressing to hearths and consciences without adapting application of positive sciences to its discussions. That is to say, *Altınoluk* suggests Muslims to use methodology of positive sciences with an aim to strengthen religious faith and prove the God; but it does not use it in its arguments, since the theme of *Altınoluk* is not on specifically scientific issues. Even though the approach of *Altınoluk* to positive sciences does not go beyond a proposition, its contribution on disseminating of application of positivist methodology in Islam is significant.

Basically, the scientific methodology contains five steps: (1) Observation and identifying facts, (2) formation of hypothesis for explaining the facts, (3) estimation process in accordance with the hypothesis, (4) testing estimations by experiments, (5) and finally renewing the hypothesis if consequences of experiments are coherent. In general, scientific methodology could be divided into two sections. The first section of scientific method bases on gathering observable, empirical and measurable evidences on subject which is determined in advance (Rampton & Stauber 2007). The second section is on verification which depends on basically experiment. In other words, the methodology in positive sciences consists of collection of data through observation and experiment on the one hand; and formulating and testing of hypotheses on the other.

Articles published by the Islamic journals, specifically in *Zafer* and *Sızıntı*, also point out that the scientific method I defined above is an objective way of inquiry and it would be unscientific to claim any theory without consulting the scientific methodology. Moreover, Veli Şirin claims in an article published in *Altınoluk* that Islam esteems only concrete knowledge rather than abstract conceptions; and any consideration without utilized, experienced and comparison is harmful (1986: 6). It seems that the perception of science in Islam firmly adhere to concrete elements, which form the basis of scientific methodology in Islam.

As it is stated, the two pillars of methodology of positive science are observation and experiment. Now I attempt to demonstrate how those two pillars are appraised in modernist approach in Islam represented in journals of *Zafer*, *Sur*, *Sızıntı* and *Altınoluk*. The first one, which is observation, is the first step in scientific method, and humans are inherently observer, particularly scientists (Torun 1987: 20-1). However, in Islamic approach, the application of observation differs from the “pure” scientific one. While the former is suggesting lining up with what you observe that is the appearance of God in nature or universe, i.e. the theophany (Demirci: 1997); the latter is based on only the material facts.

As to experience, the effort is firstly on appropriation of it. Selim Aydın argues that although Francis Bacon (1561-1626) is known as the first philosopher who emphasized the importance of experience; in fact, he conveyed and introduced the methodology of positive sciences to the Western world from İbnü'l-Heysen (Alhazen), İbni Sina (Avicenna) and El-Biruni (1993). Addition to the role of experience, relations of it with theory marks a watershed. A theory which is presented in the journals as a guide of the research has a superior position to experience. Experience would not be useful without a theory. In this regard, the theory addresses to metaphysical and religious conceptions. Because, without theoretical base which aims religious and metaphysical goals –strengthen the religious faith and proving the existence of God– experience would produce harmful ideas, i.e. materialistic comprehensions (Aydın: 1993).

There are three significant examples of articles to demonstrate how those journals utilized observation and experiment, i.e. the positivist methodology, in accordance with the religious aims: “The science points the God”, “Finding the utterance of God by means of Chemistry”, and “The role of worship in treatments”. In this part, I only dwell upon the first two examples. The last one is examined in the last part due to suitability with health issues.

The first example was published in April 1986 in *Sur*; and the second one in June 1986 in *Zafer*. Both assertions rely on discovering the utterance of God by different means: Qur’an and chemistry. Their methods are the same, but beginning points are different. The beginning point of the first one is tabulating the sections of the Qur’an (sura) and numbers of verses (see figure 1); and the second one’s is again tabulation, but it tabulates the groups and numbers of elements in coordinate system (see figure 2). Consequences of both tabulations are occurrences of utterance of God.

İLİM ALLAH DİYOR:

KUR'AN'DAKİ SURE SIRASI ve AYET SAYILARI KOORDİNAT SİSTEMİNE YERLEŞTİRİLİNCE ALLAH LÂFZİ ORTAYA ÇIKTI.

Kur'an-ı Kerim 1400 senedir mucizelerini göstermeye devam ediyor. Kıyamete kadar bütün insanlığın hidayet rehberi olan Yüce Kitabımız, her asrın ihtiyaç ve anlayışına hitap etmektedir. Son zamanlarda bunun tezahürlerine şahit olmaktayız. Furkan suresinin 20 ve 21. ayetlerinde işaret edilen hakikatin Cebelitarık'da Kaptan Cousteau tarafından ortaya çıkarılışı, 19 mucizesinin Dr. Reşad Halife'nin tesbit etmesi bunun örneklerinden. Sizlere bir buluşta daha müdesini vereceğiz. Bu buluşu genç bir araştırmacı kardeşimiz gerçekleştirdi. Çalışmaları sonucunda istatistik bilgilerini kullanarak Kur'an-ı Kerim'deki surelerin dizilişini ve ayet sayılarını bilgisayara dökünce Allah lafzini ortaya çıkardı. Bu muhteşem tabloyu grafikte izah edelim.

Grafik'in İzahı:

Kur'an-ı Kerim 114 sureden müteşekkildir.. İlk suresi Fatıha, son suresi Nâs'dır. Ayet sayısı en fazla olan sure ise Bakara olup 286 ayettir.

Grafikte sağdan sola olan kısımda Kur'an-ı Kerim'deki 114 sureyi sırasıyla görmekteyiz.. Aşağıdan yukarıya doğru olan bölüm ise surelerin ayet sayısını temsil etmektedir.

Biz sağdan sola, yani Fatihadan Nâs'a kadar olan kısma "X eksenini", aşağıdan yukarıya yani surelerin ayet sayılarını gösteren kısma da "Y eksenini" diyelim.

"X ekseninde" her sureye ait nokta 2'er milimetre, "Y ekseninde" her ayete ait olan nokta 1'er milimetre olarak alınmıştır.

"X ekseninde" her surenin Kur'an-ı Kerim'deki sırası bulunur. "Y ekseninde" ise ayet sayısı tesbit edilir. Bu iki noktanın kesiştiği yere işaret konur. Bu nokta hem sure sırasını, hem de o surenin ayet sayısını temsil etmektedir.

Örnek: Fatıha suresi 7 ayettir. "X ekseninde" Fatıha'nın temsil ettiği 2'nci milimetre bulunup o noktadan bir dik çizilir. "Y ekseninde" ise ayetleri temsil eden 7'nci milimetreden yatay bir çizgi çizilir. İkisinin kesiştiği nokta işaretlenir.

Böylece Fatıha suresi ve onun ayet sayısını temsil eden nokta bulunmuş olur. Diğer sureleri de aynı işleme tabi tuttuğumuz da grafikte (düzlem-de) 114 nokta ortaya çıkar. Bu noktaların en dışta kalanlarını birleştirdiğimiz zaman Allah Lafza-i Celâli tecelli eder.

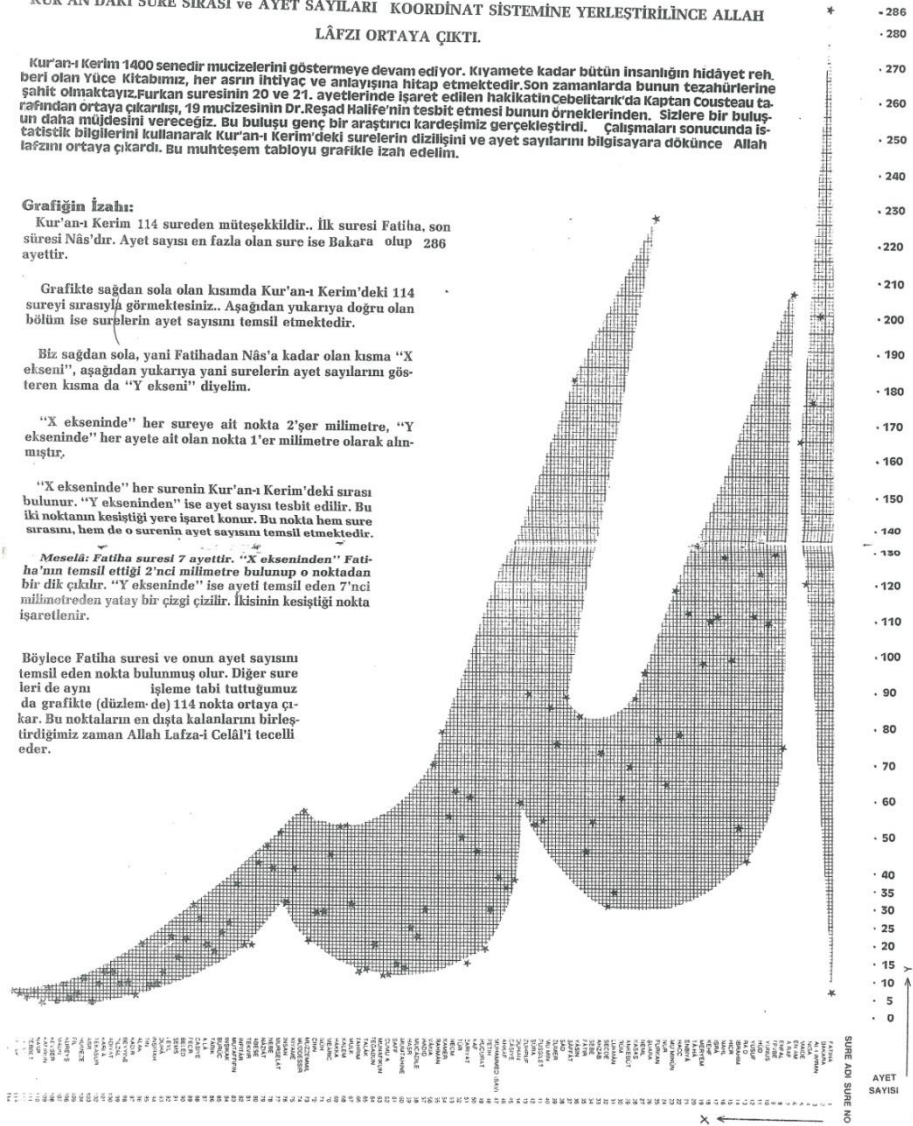


Figure 1: 'The science points the God', April 1986 in *Sur*.

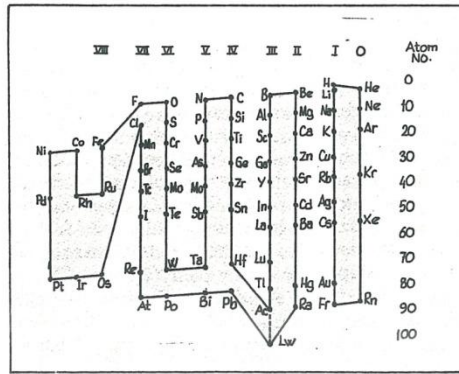
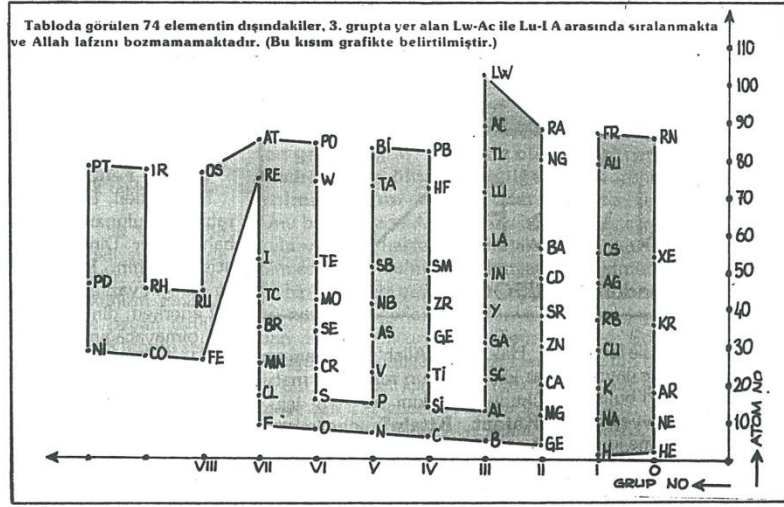
Sıra Kimya'da

Elementlerin Periyodik Sistem Tablosu																														
AMİYALANLAR										ANİYALANLAR																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18													
H	He									Li	Be	B	C	N	O	F	Ne													
										Na	Mg	Al	Si	P	S	Cl	Ar													
										K	Ca	Sc	Ti	V	Cr	Mn	Fe	Cobalt	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr			
										Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Pb	Tl	Po	Bi	Po	At	Rn
										Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn			
										Fr	Ra	Ac	Rf	Mn	Fe	Cobalt	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr					

Bu yazımızda, Susurluk Şeker Fabrikası İşletme Müdürü olan Kimya Y. Mühendisi Sayın VECİHİ BURDURLU'nun, bizzat merkez binamıza kadar gelerek açıklamasını yaptığı bir haberle yeni bir hârikaya şahit olacak ve kimya ilminin de ilâhi imzayı aksettirdiğini hayretle göreceksiniz.

Vecihi Burdurlu, günlerce uykusunu kaçıran bu çalışmasını şöyle anlatıyor.

"Son günlerde grafikler yardımıyla açığa çıkartılan ve inkâr edilmesi mümkün olmayan Allah lâfzının, mutlaka kimya ilmi içinde geçerli olduğundan hareket ederek bu araştırmaya koyuldum. Bunun için ilk yaptığım şey, Kimya'da keşfedilen bütün elementlerin periyodik cetvelini incelemek oldu. Bu elementleri, orjinal tablosunda olduğu gibi sıfırdan sekize kadar grafik düzlemin yatay eksenine üzerine yerleştirdim. Düşey ek-



İşlemin tersine çevrilmesi halinde yine Allah lafzı meydana geliyor.

sen üzerinde ise, bu elementlerin atom numaralarını işaretledim. Noktaları ikiye ikiye birleştirdiğimde "Allah" lafzının kalın bir hatla meydana gelmekte olduğunu, ancak lafzın sonundaki "he" harfinin ters çıktığını farkettim. O gece gözümde bir damla dahi uyku girmedim. Ertesi sabah grafiği kontrol ettiğimde, elementlerin dizilişinde hata yaptığımı farkettim ve hatayı düzelttiğimde; "he" harfinin de düzeldiğini âdeta ürpererek gördüm."

Burdurlu, sözünü şöyle tamamlıyor. "Bu çalışmanın en hayret verici yönü, işlemin tamamen tersine çevrilmesi (grupların üste alınarak atom numaralarının yukarıdan aşağıya doğru dizilmesi) halinde bile, aynı mükemmellikteki Allah lafzının meydana çıkmasıdır." (Bkz. şekil 3)

ZAFER 13

Figure 2: 'Finding the utterance of God by means of Chemistry', June 1986, Zafer.

It is claimed in the explanations that only the exterior points marked in the coordinate system are drawn and consequently the utterance of God appeared. In fact, as it could be concluded from the first sight, the combinations of points in both coordinate systems are designedly drawn for aiming the find the utterance of God. Moreover, they explained the beginning point of the second example as that there should be a way to find a miracle related to chemistry and it waits there to be explored. Thus, from the positivist point of view, both examples present the manipulation of positive sciences by aiming to demonstrate it as in conformity with religious conceptions.

The methodology of positive science from Islamic point of view confined to some limits as the science does in general. Indeed, these limits are concerned with restrictions for meddling in religious values and metaphysical considerations. What is conceived as positive science and its methodology in Islam refers two different thoughts. The first one is that the science is a sort of assistant in life for developing the living conditions and it must act as oriented to the Creator's principles (Polatöz 2007). That is to say, Muslims must attach importance to positive sciences as fairly as it deserves that heavily depend on the rule of God. So, in the first approach, application of science is restricted in order to prevent attacks to metaphysical or religious spheres. The second one is about proving the God and strengthen the religious faith. The assumption in this regard is that as long as Muslims elaborate positive sciences, they will be getting closer to the religious faith. This means that the religious faith and existence of God could be proved by positive sciences. Thus, there are no any limits in scientific research, because the science is basically a kind of instrument to prove the existence of God. In this regard, Yunus Çengel metaphorically likens the reasonable use of science to relationship between stomach and food: "Food for a stomach of reason is the sciences, and pleasure of feeding the stomach of reason is not less than the pleasure of feeding the real stomach. The real stomach gets full after eating some food. But the stomach of the reason does not have a feeling of getting full by studying positive

sciences. The more it is fed, the more it develops.” (2008c) Therefore, studying positive sciences would bring the “real” religious faith which could not be confuted by positive sciences, because the science would not prove and confute the same facts at the same time. Thus, these two approaches to positive sciences in Islam demonstrate the controversial application or understanding of positive sciences.

Basically, modernist approach in Islam explains differences between religion and science as a difference of methodology and way of expressions. For, both science and religion serve common objectives. As Selim Aydın points out that it should not be forgotten that the conflict between science and religion is due to differences of understanding and interpretations (2002).

As to the concept of theophany through observing the nature, it is first needed to dwell upon the perception of nature in Islam. The nature is one of the most remarkable subjects in examination of Islamic journals regarding the use of positivist methodology, particularly observation. Due to the fact that the authors, who are mostly the scientist in the disciplines of physics, biology, zoology, geology, botanic and ecology, mold the main arguments of the articles on observation of the nature in Islamic journals, the impact of positivist methodology in Islamic approach could be best observed in those articles. For, the principle method of scientific research, which is observation, is eligible to demonstrate the impact of positivist methodology in Islamic discourse appropriately.

As it was stated in previous parts that the aim of using positivist methodology in Islam is strengthening the religious faith, proving the existence of God and disseminating the religion of Islam; similarly, the goal of observing the nature is basically to find signs and evidences which could produce the belief of metaphysical existence of religious values and consolidating the divine wisdom. In this regard, the appearances of the God in nature mark the critical point that emerges in the definition of the concept of theophany which means the appearances or a visible manifestation of God. In order to seek and propagate the idea of theophany, articles on nature

in journals of *Zafer*, *Sur* and *Sızıntı* put the practical use of positivist methodology which would produce the quality of order, complexity and diversity in nature. The situation of *Altınoluk* differs in the practical use of positivist method in a similar manner of application as methodology. As it was mentioned before, the aim of *Altınoluk* is not spreading the religious faith by means of positive sciences, but suggesting the application of it. Additionally, due to the changing of main theme in *Sur* in late 1980s and specifically in early 1990s, articles in it on nature and pursuing the theophany via positive sciences decreased to almost the level of *Altınoluk*. Thus, this part generally consists of arguments in *Sur* (until 1990), *Zafer* and *Sızıntı*.

The given consequences of observing the nature are noticing the order, complexity, and diversity in nature. Those consequences are valid for both those have religious motives and “pure” scientific ones. The difference between “pure” scientific one and the religious oriented one emerges in interpretation of outcomes. While the “pure” scientific approach is not disposed to metaphysical explanations, the religious one has not only tendency to interpret consequences as theophany, but it also aims to associate the order, complexity and diversity in nature with the theophany in advance. To state the matter differently, Islamic scientists do not reach the belief of theophany because their observations resulted to order, complexity and diversity. Possible contrary outcomes would also lead them to the idea of theophany, too. Hence, the idea of theophany is likely the only one outcome of their scientific observations, since the aim of elaborating positive sciences is related to the religious goals.

The Islamic approach also criticizes the “pure” scientific methodology in observation of the nature. The basic critique on materialistic method is that even though the results of both approaches in observation are the same, conclusions or interpretations are different. Hence, the Islamic approach accuses the materialistic one of manipulating the outcomes of research, because the evidences which prove the God is so precise and any consequence without proving the existence of God must be a manipulation.

I do not attempt to demonstrate which one is the manipulation of the scientific method in observation of the nature. However, it could be explicitly seen that the conclusion of the Islamic approach is an interpretation of data obtained from observation of the nature notwithstanding their argument.

The most characteristic examples to illustrate the aim of pursuing theophany could be observed in series of “Yaşadığımız Dünya” (The earth we live in) by H. Hüseyin Korkmaz in *Sur* and “The window opens to sciences” (İlimlere Açılan Pencere) by Sinan Bengisu in *Zafer*. In those series, various issues related to nature are scientifically examined in detailed. However, after the comprehensive scientific examination of each subject, every article is concluded as that each detail in nature is a sign for us to believe in God and every detail proves skillful and talented ability of God for creating the universe (Korkmaz 1981; Bengisu 1977a). İşcan’s argument is also significant in connection with the point previously mentioned. He claims that the formation and development of science accompany with the belief that the order in nature is created by God; and the idea of creation comes up with an order (1998: 179-180) that implies the concept of theophany with regard to power of God.

From the Islamic point of view, God created the universe from atoms to planets in order and send the religion of Islam for the people to live in order as well. The power of God does not only appear in creation of the universe, but also afterwards, which means that God controls the natural events happen in earth. Thus, each event has its purpose and is at God’s disposal in terms of response to defects of particular society. Therein, earthquakes, thunderbolt (as a sword of God), avalanche, and so on are the best examples to illustrate the role of God in natural events. The Islamic approach interprets those natural events as a punishment of the society which is deprived of initially ethic and religious faith. According to the article in *Sur* in 1985, we must be indebted to God for those earthquakes; because the impetus of seismic waves would be one-hundred-fifty instead of below ten

(Abazel 1985). So, particularly an earthquake and natural events in general are construed as warning to the people in the Islamic approach.

As to the subject of global climate change in earth, reasoning the issue is consistent with previous logic which is that the earth is created by God with wonderful order and functionality. If something went wrong, it would be due to choices and implementations of the people. That is to say the Islamic approach presents the people's behavior which supposedly damage and disrupt the order and the harmony on earth provided by God as the only reason for problems on it. There would be the only one reason for climate changing that is incomprehension of the real value of the world and the people's divine aim on it, just as the reason of poverty, starvation, war and other similar issues (Demirci 2003). Due to the fact that the power of God is perfect and infinite, any improper event that emerges on earth should be on account of the deeds of humans.

Two significant articles exemplify the emphasis of order in nature in Islamic perspective: "Mathematical order of nature" by Bayram Yenikaya in 1997 and "Divine ratio in aesthetics" by Ufuk Alkan in 1993. Both articles were published by journal of *Sızıntı*. The first one argues that God did not only create the universe in order, but it also attached some beautifulness in it for sublimating the souls of the people. He likens the art or science of God in creation of earth in which the science of mathematics emerged as knitting a lace (Yenikaya 1997). Basically, what it tries to point out is that the universe was created by means of positive sciences under the control of God, and the elaboration of the positive sciences would lead us to observe existence and ingenuity of God.

The second example is concerned with the art of aesthetics. Alkan explains the golden ratio in mathematics as divine ratio (he uses these terms interchangeably) which addresses to perfect ingenuity of God in the process of creation of the nature in order. It is claimed in the article that any artistic work without the golden ratio could not be qualified to present "real" fineness. In other words, it could only display the stagnant and simplistic characteristics, which could never provide the world-wide reputation.

Fundamentally, the golden ratio exists in nature which is created by God, and the task of an artist is to imitate the miraculous order and ratio of the nature in his/her artistic works. The Great Pyramid of Giza in Egypt, Parthenon in Athens, Duomo in Milano and works of Mimar Sinan, Michelangelo, Goetz Henri and Manet in the history and the works of Mehmet Siyahkalem, Cemal Tollu, Osman Oral, Osman Hamdi, Şeker Ahmet Paşa, Süleyman Seyit Bey, Hoca Ali Rıza, Abidin Elderoğlu, Şeref Bigalı in the twentieth-century are the best examples to illustrate using of golden ratio in art. In addition, appearance of the golden ratio does not only occur in artistic works, but also in living creatures of animals and plants, such as the number of petal, starfish and skeleton of monkeys (Alkan 1993).

Besides emphasizing the order in nature for demonstrating the hands of God in it, stressing complexity and diversity is another issue in the Islamic approach with regard to positive sciences. The basic argument in this subject is concerned with impossibility of creating such a complex and diverse system without a divine power which is actually explained as controller of it. There are many articles on this issue published in journals of *Sur*, *Zafer* and *Sızıntı*, I give only some crucial examples of them: Explaining the complexity of thunderbolt (see İsmailoğlu 1976: 38), hydrogen atom (see Korkmaz 1977b: 11), snow (see Vural 1986: 1), gravity (see Yıldırım 1980: 12), and neutrons (see Çakmak 1989: 39). Moreover, in some cases, argument does not scientifically go into detail to underpin basic argument. In this respect, translated article from *Science* 85 suggests observing very basic attitudes of human and events in nature by claiming that even the simplest process of seeing or hearing whisper us the complexity and diversity of nature that is marked as an evidence to prove existence of God ('Basit Görülen İşlerdeki Hârikuladelik' 1985).

In addition to the subject of complexity, articles on biology and specifically functionality of human metabolism play a main role in this context. The assumption resembles the previous ones: God created such a complex creature (human) with a perfect system that demonstrates the power of God and impossibility of coincidence. For this respect, examples

of articles are generally on proteins (see Şirin 1985: 4), miracle of beard (see Vural 1987: 22), DNA (see Bengisu 1978b: 18), cells (see Bengisu 1978a: 16), and gene technology (see Yeprem 2007: 13; Boyacı 1987).

After examining the issues of order and complexity, the subject of diversity also marks a watershed. It is commonly explained by reference to animals and their role and position in nature. According to the Islamic approach, attitudes and existence of every living creature in the universe prove the existence of divine power. All these systems in order and complexity could not occur by coincidence. Again, there are number of articles to illustrate importance of animals in Islamic approach, but I just mentioned the characteristic ones. The most important animals in terms of their distinctiveness are certainly bees (see Kırlioğlu 1983; Alan 1980) and ants (see Chavvin 1980:3). The diligence, living in order and devotion to the community might be some reasons of emphasizing bees and ants in stressing the diversity and complexity in nature. Beside bees and ants, frogs (see Korkmaz 1977a: 17), germs (see Nalçakan 1978; Bozkurt 2004a, 2004b), flies (see Dağlı 1978), worms (see Korkmaz 1981b), foxes (see 'Bir Tilki Yuvasındaki Hayat' 1980: 20), ducks (see Namlı 1980), dragonflies (see Alan 1981), birds (see Yavuzoğlu 1983a), termites (see Yavuzoğlu 1983b), and butterflies (see Çaldıranlı 1986a) could be given as examples in this subject.

Accordingly, stressing the importance of diversity, order and complexity and explaining them as evidences for proving the existence of God resulted in opposition to the Theory of Evolution. Although most of the previous arguments appear in journals of *Zafer*, *Sur* and *Sızıntı*, critique of the Theory of Evolution come into view in *Altınoluk*, too (Babuna 2000: 45). The reason of examining the Darwinian Theory in *Altınoluk* would be because of needlessness of using the positive sciences as an instrument to prove arguments. Thus, the articles in *Altınoluk* on the Theory of Evolution are commonly speculative.

Similarly to the previous topics, various arguments fill the pages of the Islamic journals in terms of critique of the Theory of Evolution, such as

“Coincidence cannot be possible” (Thuan 1989), “The earth with respect to physics and chemistry” (see Çınar 1983: 16-7), and “The first explosion” (see Songar 1984). Therewithal the discussion of power beside energy marks the decisive point in the critique of Darwinian Theory. Yunus Çengel asserts that if the universe was the universe of materials, it would have been cloud of dust hitherto. Hence, the old view of existence consisted of only the energy; but the new view adds the power to the energy for generating the existence (2009). In this respect, the power, which is defined as glue holding the substance together, addresses to the divine power of God, which forms the foundations of critique of the Theory of Evolution.

3.4. The Use of Science in Technology and Health Issues

Technology has played a fundamental role in shaping the people’s everyday life and increasing the living standards by affecting the social, economic and political systems particularly for two centuries. Accordingly, the role of technology has become a critical issue in various debates, especially in Islamic journals which aim to reconcile positive science with religious values. The significance of the religious point of view appears even in the definition. While, in general terms, technology is referring to tools and products that increase the capacity of people for understanding the world, in Islamic point of view it implies more than application and developing the materials facts, for instance using of the technology as an instrument in conformity with Islamic values.

The crystallization of significance of the technology in Islamic approach occurs in perception of history which relies on progressive apprehension. In the Islamic approach, the perception of history marks that neither supporting nor opposing to the technology is a matter of fact, because it is a part of human nature. The progress which is concerned with developing the systems or tools for enhancing the living standards willingly or unwillingly takes place. What is critical in this progress is that the society should not ultimately aim the technological and economic progress (Noyan 1998). It should assist to develop new system and tools that target to improve living conditions within Islamic tradition.

In essence, the concept of technology relates to two main arguments in modernist approach in Islam that I try to examine in this final part of the third chapter. Firstly, it is pointed out that the emergence and the development of technology are contingent upon inspiring and even imitating of nature. In this regard, discussions named as bionics in *Zafer* have crucial importance in early 1980s; because those discussions shaped the conception of technology in a large scale. Secondly, the use of technology is based on pragmatic purposes in accordance with the religious goals which are strengthening the religious faith and disseminating the religion of Islam. Thus, it could be pointed out that the Islamic approach to technology is precisely instrumental in substance.

Examining the first issue, which is bionics, paves the way for understanding the perception of technology in Islamic approach. The bionics is essentially the application of methodology which is established on nature to the study of modern engineering systems and technology, which is interpreted as imitation of the nature. Indicating that the nature is originating point of technology is another form of endeavor to sublimate the power of God. Namely, God has ultimate power and the nature in which origins of technology and other “advanced” qualities could be found is a sort of masterpiece of God. Thus, due to the fact that the technology is a product of the people who are created by God, it must also depend on the power and mighty of God which could be observed in nature.

The methodology used in technology is hence based on observation. If the power of God is omnipotent and the origins of any development already exist in nature, the first step is accordingly observing the nature. In this manner, the importance of positivist methodology which relies on observation and experiment marks a crucial point in Islamic perception of technology.

The most characteristic examples of articles, which is on bionics, come in view in *Zafer* in early 1980s. After 1985, arguments on bionics became shallow and its emphasis gradually diminished in *Zafer*, while *Sızıntı* was taking part of the similar discussions at the same time. The essential

argument on bionics is that any technological invention is inspired or even copied from the nature in which animals plays a key role in this respect. Similarly in observation of the nature, bees and ants are favorite animals in this context of imitating the nature and technology. While the former is related to engineering technology by their ability to construct complex buildings (Yıldırım 1979), the latter is referred to plane and chopper due to its flying ability (Çaldıranlı 1986b). Therefore, the technologies of architecture and flight are found on and copied from remarkable features of animals of bees and ants. Besides bees and ants, the Islamic approach investigates the various similarities between technological discoveries and animals, such as the anesthetizing capability of mosquito and operating surgeon (see Suavi 1978), birds and system of planes (see Kaplan 1985), metabolism of polar animals and refrigerating systems (see Karlıdağ 1994), and fishes and inspiring the productivity of energy production (see Polatöz 2008). Additionally, the article named as ‘İlimler ve Canlılar’ (Sciences and living beings in English) written by Polat Has in 1979 in *Sızıntı* summarizes almost the whole idea of relations between nature and technology, and it gives several examples from scientific researches which inspired from nature animals. He alleges that the technology is not as proficient as animals in nature which is created by God, and it is precisely observable that systems and logics of scientific discoveries imitated qualities of the masterpiece of God which is nature. He points out several relations between animals and technological discoveries by exemplifying the “advanced” eligibility of animals as such: rattlesnake’s sensible detector that emits infrared radiation, electrical fishes’ ability to measure the conductivity of objects, and sensation of bats as radar system (1979a).

The second subject is the use of technology which could be defined as pragmatic use as well. Unlike many other issues in Islamic journals, the arguments on the use of technology are not concerned with solemn intellectual matters and they are lack of probing the philosophical consideration. In other words, the modernist Islamic approach in Turkey has appraised the use of technology as pragmatic or instrumental application,

rather than elaborating the subject of using the technology in detail by referencing to its philosophical perspectives.

The basic assumption of application of the technology regarding the religious point of view is that technological inquiries and discoveries are not inherently sin. On the contrary, the technology is good in terms of its advantages to enhance the quality of life. However, what is crucial in using the technology is the way of using it, i.e. the method. That is to say, although the nature of technology is inherently good, the use of it differentiates the possible outcomes. Correspondingly, two different types of using the technology identify the character of technology in Islam: If the technology is used for good purposes, it is a good for all people; if not, the technology would engender social, economic and political corruption. In a general manner, the science could be harmful if it is used by the hands of irreligious people (Dere 1982: 4).

The good purposes are indeed religious goals, which are strengthening the religious faith, proving the existence of God and disseminating the religion of Islam, in this respect. On the other hand, the harmful purposes are generally concerned with materialist conceptions and “pure” scientific researches. On that account, the instrumental use of technology which is the most characteristic hallmark in modernist approach with regard to application of positivist methodology to Islamic discourse for religious purposes is expedient for Islam (Nurbaki 1987: 17).

The most influential and comprehensive element in the use of technology is certainly effectiveness of mass media, particularly after 1990s in which the role of television gained value beside radio in Turkey (Ayvaz 1987). As a consequence of previous explanations, current television and radio channels (considering the inefficacy of Islamic mass media apparatuses in early 1990s) are destructive in both social and religious manner (Dağlı 1976: 29).

The need of mass media apparatuses which are oriented to Islamic goals signifies the arguments in Islamic journals of *Zafer*, *Sur*, *Altınoluk* and *Sızıntı* throughout the 1990s. Suitable example in this regard is introducing

the Islam oriented television channels in journals, such as Özel TV, Hayat TV and Birlik TV (Demiröz 1993: 37). Cenap Şirin asserts that until founding the television channel which conforms to the religious and national structural value of Turkey, any other attempt is damaging and sin (1993: 8). Paradoxically, Islamic discourse on the use of technology frequently relies on the fundamental assumption which claims that any technological discovery or invention, which is television in this context, could not be harmful, because the creator of any technological tool or system is again the God (Korkmaz 1978: 34). Thus the conclusion on this respect would be that on the one hand technology could not be harmful due to its origins which is rooted the mighty of God, but on the other hand it does would be harmful because the use of technology depends on the hand of insufficient or corruptible humankind.

To sum up, according to the modernist Islamic approach in Turkey, the use of technology has a critical importance in appreciation of the concept of technology. Namely, Muslims have to use technology in a large extent for their religious purposes. Being offended to the technology in essence cannot be acceptable proposition. The most precise example of illustrating the importance of technology appears in access to Islamic journals: Comparatively advanced and comprehensive Internet accesses to the articles published in *Zafer*, *Altınoluk* and *Sızıntı*. So, the use of Internet technology for disseminating the articles seems the most apparent example of using the technology by the modernist Islamic approach.

Finally the last subject is the health issues which gained impetus especially after 1990 specifically in *Sur* (see Saygılı 2005: 34; Bengisu 2005: 58; Şahin 2007: 54; Aksoy 2009: 20) due to the inability of competition the scientific symbolism of *Zafer* and *Sızıntı*. As İşcan points out that Islam pays attention to healthiness of life more than religion, and it appreciates the physical necessity, needs, and prosperity as it does to spiritual one (1998: 90). Thus, the importance of health issues occupies the great deal of proportion in Islamic discourse.

The general theme of the articles related to the health issues is molded by two conceptions: examining and suggesting the scientific method for medical recovery at the beginning, and if incapability of positivist methodology in medical treatments occurs, proposing the religious practices for treatment.

Mainly, what is suggested in Islamic journals are, in the first place, applying the medical suggestions; if it is not resulted in healing, religious practices should be consulted for example praying, worshiping and fasting. The last practice, fasting, is the common subject in exemplifying of the benefits of religious obligation for healthiness. The general idea of fasting is that Muslim must practice their religious obligations, in which fasting is one of them, on account of not only their religious importance, but also their benefits for mundane matters like health (Ateş 1976:2-3). Another critical example is suggestions of psychiatrist Sefa Saygılı on giving up smoking. At the outset, he recommends medical examination techniques as taking a shower, drinking water, having rest, eating vegetables and fruits. Then he adds praying to his recommendations if the former ones do not serve the purpose, i.e. treatment (1988: 38). Thus, as disease is the providence of God, the healing also ought to be the hands of God (Healy 1991: 8). For that reason, the Islamic journals of *Zafer*, *Sur*, *Altınoluk* and *Sızıntı* situate their positions to health issues in two-dimensional way: first one is clinging to the methodology of positive sciences as it is pervasive in general and second one is devotion to Islamic values in every respect due to the belief that every single matter originates from the power of God.

The most significant example regarding the use of positivist methodology in health issues is the article named 'Esmâ-i Hüsnâ'da Şifa Mucizeleri' (Health miracles in names of God in English) which was written by Ahmet Altun and published in *Sur* in 2006. Ahmet Altun introduces the outcomes of scientific research, which lasted three years, made by Egyptian scientist Prof. Dr. İbrahim Abdülkerim, who is also the inventor of the field of bio-geometry. As he cites from Abdülkerim that reading repeatedly the names of God stated in Qur'an produces some physiological changes in human

body which would implies recovery of physiological disease. After experiments and researches implemented by Abdülkerim on the affection of reading the names of God for three years, he concluded that some specific names assist the treatments of the specific diseases. He gives over twenty names of God that of each recovers different disease. Some of them are *el-hayy* for a kidney, *el-bedi* for hair, *er-reşid* for prostate, *en-halik* for a uterus, *el-muheyyim* for rheumatism, *el-bari* for a pancreas, and *el-latif* for sinusitis (2006: 20).

It is also the case that the alternative medicine took part of the arguments during 1990s and early 2000s in Islamic journals beside other subjects mentioned above. By all means, the effort of examining the alternative medicine is emphasizing the recovery which could be possible by natural methods. The reason seems the same: Nature which is the masterpiece of God could cure and solve every problem occur on earth; hence the consultation should be based on the power of God. In this regard, acupuncture is the most common issue stressed in specifically *Sızıntı* (see Akyol 1998; Sarsılmaz 2000; Demircan 2000; Gönüllü 2000).

As a consequence, application of positivist methodology appears in several issues in Islamic journals of *Sur*, *Zafer*, *Altınoluk* and *Sızıntı*. In this part I try to examine the use of positivist methodology in technology and health issues, and also the use of technology in purposive manner in Islam. The general idea is that the goodness of technology depends on its application, i.e. application by people. If it is used for religious goals, nothing is wrong with it; if it is not, the sin and harmful attitude of technology take place. Thus, Muslims should utilize the technology as an instrument to strengthen religious faith and disseminate the religion of Islam by means of technology itself. As to health issues, observation and experiment is heavily used in this topic, but when incapability of scientific method happens, another treatment techniques which base on religious conception is proposed, which demonstrates the changeable and conditional trust of Islamic approach to the methodology of positive sciences.

CONCLUSION

As it has been raised in the introduction, the research question of this study is that how the positivist approach became a viable component in Islamic discourse in Turkey so that this juncture produces reconciliation of science with Islam. The research question, firstly, signifies the importance of this work regarding the way of penetration of scientific methodology into the Islamic discourse, and secondly aims at demonstrating the materials which consist of positivist philosophy in Islamic journals of *Sur*, *Zafer*, *Sızıntı* and *Altınoluk*.

I refer to the philosophy of Auguste Comte in discussions of positivism in which two distinguished characteristics of positivist philosophy of Auguste Comte with respect to its application to the Turkish context best suits to its kernel: Methodology of a scientific research that based on observation and experiment, and the transcendent character of positivist stage over theological and metaphysical eras, i.e. the concept of progress within order. Before examining the relations between positivist philosophy and Islamic discourse in Turkey, it was needed to lay stress upon the components that provided the ground of interaction. For this reason, the first and the second chapters were organized to denote the roots of positivist philosophy generally in the East and particularly in Turkey.

As it was inferred from the first chapter, the channels of interaction between the cognition of “new” science in the West and the modernist approach of Islam in East occurred in, on the one hand, as response to the colonial attitudes of the West (particularly in Afghani); and on the other hand, the need for educational reform in accordance with the Western educational system (particularly in Abduh). Namely, the influence of

Western civilization in the modernist Islamic approach had been fed by both political and social considerations.

Another significant hallmark of modernist tradition of Afghani (followed by Abduh and Rida) is that their contribution established the field or space for practicing the theoretical thoughts in Turkey, or at least had a chance to attempt. On the other hand, the situation in Ottoman Empire at the end of the nineteenth century was in the need of reformist movements or ideas with relation to outcomes of *Tanzimat* period. It could be claimed that the visit of Afghani to Istanbul in 1870 aroused the political movements (overlapped with the emergence of the idea of *pan-islamism*), which shows the impact of his opinions on the political sphere in Ottoman Empire.

As to the social sphere, educational reform programs of Islamic scholars, particularly M. Akif, inspired and benefited the thoughts of Muhammad Abduh that was on sustainable educational reform. As a matter of fact, it could not be overvaluing the importance of the modernist tradition of Afghani as mentioning that influence of his contribution is the most effective one in Islamic world, and partially played a key role in political and social movements in Ottoman Empire.

Because they were concentrating on the educational reform programs of Islamic scholars in Turkey in terms of their stresses on the use of positive sciences, political movements were excluded from the extent of this research. In this context, the contributions of Bediüzzaman Said Nursi and Mehmet Akif Ersoy were placed in the core of the argument, because the change of the Islamic discourse toward noticing the importance of the use of positivist methodology in any sort of educational process (religious or non-religious) could be best observed in their ideas. From a certain point of view, M. Akif divided the perception of the West into two spheres: scientific or technological one and cultural or spiritual one, which expresses that the progress could only be achieved by not only acquiring the scientific and technological foundations of the West but also being devoted to the cultural values of Islam. The idea of dividing the perception of the West directed and revealed the Islamic movements throughout the second half of

the twentieth century, and it has been the common characteristic of most Islamic approaches in Turkey up to the present time. On the other hand, Bediüzzaman Said Nursi's emphasis on the systematic use of positive sciences within religious issues affected the stand of religious communities in Turkey, and also it led to the establishment of *Nurcu* community which basically aimed to accommodate positive sciences with religious conceptions in Turkey. Regarding the effect of *Nurculuk* after 1980s, his contribution could be interpreted as a success.

Passing to the contribution of Bediüzzaman Said Nursi and M. Akif Ersoy from the modernist tradition of Afghani, Abduh and Rida without considering the initial interactions between the Western thought and Turkish intellectual life would seem problematic. Therefore, I argued the remarkable impact of the Western thought on Turkish intellectuals in terms of wavering between the Islamic values and Western ones: Young Ottoman thought and Ziya Gökalp.

Beside fluctuation quality of interaction, literary sources, such as journals, newspapers and so on, played an important role in disseminating the intellectual and political ideas in this period. Basically, the influence of positivist thought on Turkish intellectuals did not go beyond transferring the Western philosophy to Turkish intellectual life. Even the critique of positivism which was done by Islamic scholars (İsmail Fenni and Elmalılı Hamdi Yazır) is just based on conveying the ideas of West rooted critique of positivism: Gabriel Seaille and Paul Janet (Korlaelçi 2003: 222).

In order to examine the use of positivist methodology in Islamic journals of *Sur*, *Zafer*, *Sızıntı* and *Altınoluk* appropriately, I referred to the journey of positivist thought from the West toward the East (in Chapter 1) and reflections of positivism in intellectuals and Islamic scholars in Turkey (in Chapter 2). Basically, it could be pointed out that the educational reforms, which includes the functional use of positive sciences in educational processes, and literary sources had remarkable importance in intellectual movements by aiming to disseminate the ideas. I observed the similar method of becoming widespread by means of literary materials after 1980s

in Islamic movements, which determined journal based research of this work. In addition, the instrumental use of a thought from other civilizations (it is positivist thought of the West in this context) has seen the common characteristic of both in positivist intellectuals in late Ottoman Empire and in Islamic approach in the second half of the twentieth century in Turkey.

The essence of the positivist philosophy of Auguste Comte relies on scientific research, which is established on observation and experiment, and reorganization of a society. The former claims that the scientific methodology inherently eliminates the metaphysical conceptions that mark the most controversial point in Islamic approach; and the latter stresses the need of positivist philosophy for reorganizing a society toward acquiring the qualities of order and progress, which demonstrates the significance of adhering to the positivist philosophy in late Ottoman Empire. Comte introduced the positivist philosophy as response to events occurred in his time. That is to say, the revolutionary movements would produce progress; but, the progress without order could not turn to a good purpose. Similarly, the conservative ideas would produce the order; yet, the order without progress is inefficacious idea. Thus, the positivist philosophy is the one which could lead society to progress within order.

The most important substance of positivist philosophy of Auguste Comte beside methodological concerns and order and progress is the transcendent character of positivist stage over theological and metaphysical ones. As it was argued before, Auguste Comte established the principle of three stages in order to give superiority to the positivist stage over theological and metaphysical eras.

From this perspective, the examination of the Islamic journals demonstrated that the social structure of positivist philosophy of Auguste Comte does not fit the situation in Islamic discourse. Furthermore, it appeared in the Islamic arguments disparately. Namely, as Auguste Comte points out that the scientific researches based on observation and experiment should essentially exclude the metaphysical conceptions as progressing from theological era to positivist era. However, one cannot observe a linear

progress in Islamic approach in Turkish context as Comte pointed out. What I inferred from the examination of the Islamic journals in terms of the use of positivist methodology in religious and metaphysical arguments is that the progress as Auguste Comte indicated might be reversed in Islamic context of Turkey: “progress” (as it is seen in Islamic discourse) from positivist stage to the theological or metaphysical one. Nevertheless, due to the extent of this dissertation, it is more adequate to claim that the Islamic discourse is shaped by the need of response to the cultivation of science via reconciling science with Islam within positivist stage, rather than intending to return to the metaphysical or theological era.

Hence, the use of positivist methodology for religious aims seems problematic in practice. The preconditions of a scientific research mark the critical points that appeared in the main goal of emphasizing the science: Strengthening the religious faith, pursuing the theophany in order to prove the existence of God by observing the nature, and disseminating the religion of Islam. Those predetermined aims of the logic of scientific research in Islam affect the objectivity of science by all means. Another problem considering the critical examples of using the positive science in Islam – demonstrated in the third chapter– could be defined as constraining character of the use of scientific methodology in religious issues. Moreover, the endeavor of associating the positivist thought with Islam via publishing the book named as *Islam and Positivism*⁹ (see Comte 2008), which contains the articles on the religion of Islam in writings of Comte, shows the constrained attitude.

The disparity of the use of science in Islam has significant importance in the positivist methodology in the Islamic approach. When all sorts of use of science in Islam are taken into account, which are in technology, biology, health, researching the nature, and also establishing the perception of science, it could not be unfair to claim that the modernist approach in Islam

⁹ The content of this book is not about the ideas of Comte on Islam, but it collected the parts or phrases where relevantly or irrelevantly the religion of Islam was mentioned by Comte. Thus, it is not a book in which one could find the ideas of Comte on Islam.

in Turkish context instrumentally utilize the positive sciences for its religious / metaphysical goals to some extent. This is also apprising the positivist thought above its substantial sources, which was also criticized by Islamic intellectuals as well (see Yüksel 1991: 119): confusing the nature of positive sciences by speculative approach.

As an epilogue, the desideratum to response to the Western thoughts and systems would naturally produce interaction between the “old” Islamic values and the “new” Western ones – as in the case of Turkey specifically after 1980s. From this perspective, the efforts of reconciling science with Islam and accordingly the interactions and relations with the West would be more intensive in the near future.

BIBLIOGRAPHY

- Abazel, Mustafa, 1985, 'Tarihte, İlimde ve Dinde Deprem', *Sur*, 97.
- Abduh, Muhammed, 1986, *Tevhîd Risâlesi*, Sabri Hizmetli (trans.), Fecr Yayınları, Ankara.
- Afganî, Seyyid Cemâlüddîn-i, 1956, *Tabiatçılığı Red*, Aziz Akpınarlı (trans.), Diyanet İşleri Reisliği Yayınları, Ankara.
- Ahmed, Aziz, 1990, *Hindistan ve Pakistan' da Modernizm ve İslam*, Ahmet Küskün (trans.), Yöneliş Yay., İstanbul.
- Akad, Nazif Baki, 2005, 'Modern Bilimde Kaybolan Hikmet', *Sızıntı*, 322.
- Akben, Ali, 2006, 'Metabolik Sendrom Yada Sendrom-X', *Altınoluk*, 241, p. 60.
- Akgündüz, A. Kadir, 1989, 'Mehmet Akif ve Muhammed İkbal', *Sur*, 155, pp. 44-45.
- Akkan, A. Arslan, 1984, 'İlim-irfan', *Sur*, 99, p. 40.
- Akşin, Sina, 1980, *Yüz Soruda Jön Türkler ve İttihat ve Terakki*, Gerçek Yay., İstanbul.
- Akşin, Sina, 2002, Düşünce ve Bilim Tarihi (1839 – 1908), in *Türkiye Tarihi Cilt 3: Osmanlı Devleti 1600 – 1908*, Sina Akşin (ed.), Cem Yayınevi, İstanbul.
- Aksoy, Gülay, 2009, 'Mutlu Olmanın Yolları', *Sur*, 394, p. 20.
- Akyol, Semih, 1998, 'Akupunktur ve Çin Tıbbının Tarihi Gelişimi', *Sızıntı*, 234.
- Akyüz, Ubeydullah, 1995, 'Din- İlim Beraberliğine Temelden Bir Yaklaşım', *Sızıntı*, 200.
- Akyüz, Ubeydullah, 1997, 'Din Ve Bilim İçin İki Ayrı Alan mı?', *Sızıntı*, 221.
- Alan, Şerafeddin, 1980, 'Ekonomi Üstadları', *Sızıntı*, 14.

- Alan, Şerafeddin, 1981, 'Yusufçuk', *Sızıntı*, 34.
- Alkan, Ufuk, 1993, 'Estetikte İlâhî Oran', *Sızıntı*, 174.
- Altun, Ahmet, 2006, 'Esmâ-i Hüsnâ'da Şifa Mucizeleri', *Sur*, 365, p. 20.
- Arıkanlı, Adem, 2007, 'İkbâl, Mevlâna ve Pakistan', *Sızıntı*, 339.
- Arslan, Esat, 2004, 'Bilimin Muhtaç Olduğu Işık', *Sızıntı*, 306.
- Ateş, İbrahim, 1976, 'Modern Tıp ve Oruç', *Sur*, 6, pp. 2-3.
- Atıfoğlu, Abdülvasıt, 1997, 'İlim ve İnsan', *Altınoluk*, 131, p. 53.
- Atikkan, Zeynep (18.11.1992), 'Müslüman Medyası', *Hürriyet*.
- Aydın, Selim, 1993, 'Keşif Ve İcatlarda Teori İle Deneyin Önemi', *Sızıntı*, 170.
- Aydın, Selim, 2002, 'Yeryüzü Bekçileri', *Sızıntı*, 277.
- Ayvaz, Muvaffak, 1987, 'Yeni Bir Kültüre Doğru', *Sızıntı*, 105.
- Babuba, Cevat, 2000, 'Altınoluk Röportaj: Cevat Babuna ile Gen Haritası Üzerine... "İlahi Kudretin Eseri"', *Altınoluk*, 174, p. 45.
- Bengisu, Nihat, 2005, 'Kıl Dönmesi Nedir?', *Sur*, 350, p. 58.
- Bengisu, Sinan, 1977a, 'İlimlere Açılan Pencere', *Zafer*, 2, p. 4.
- Bengisu, Sinan, 1977b, 'Din ve İlim', *Zafer*, 11.
- Bengisu, Sinan, 1978a, 'Hücreler Ordusu', *Zafer*, 16, p. 16.
- Bengisu, Sinan, 1978b, 'Hayatın Sırrı', *Zafer*, 18.
- Berk, Özlem, 2004, Batılılaşma ve Çeviri, in *Modern Türkiye'de Siyasi Düşünce Cilt 3 / Modernleşme ve Batıcılık*, Uygur Kocabaşoğlu (ed.), İletişim, İstanbul.
- Boyacı, Hakan, 1987, 'Gen Mühendisliğinde Yeni Bir Merhale', *Sızıntı*, 100.
- Bozkurt, Yıldız, 2003, 'Hayatı Aramak', *Zafer*, 315, p. 37.
- Bozkurt, Yıldız, 2004a, 'Elektrik Üreten Bakteriler', *Zafer*, 328, p. 28.
- Bozkurt, Yıldız, 2004b, 'Çevreci Bakteriler İşbaşında', *Zafer*, 330.
- Çakır, Ruşen, 1991, *Ayet ve Slogan*, Metis, İstanbul.
- Çakmak, Osman, 1989, 'Nötrino'lar', *Zafer*, 153, p. 39.
- Çaldıranlı, Selim, 1986a, 'Kelebekleri Tanıyor musunuz?', *Sızıntı*, 87.
- Çaldıranlı, Selim, 1986b, 'Karıncalarda Mühendislik', *Sızıntı*, 85.

- Carnap, Rudolf, 1966, The Elimination of Metaphysics Through Logical Analysis Of Language, in *Logical Positivism*, Ayer, A. J. (ed.), The Free Press, New York, pp. 60-81.
- Çavdar, Tevfik Cemal, 1982, *Türkiye’de Liberalizmin Doğuşu*, Uygarlık Yayınları, İstanbul.
- Cemil, Akif, 2006, ‘Hangi İlim’, *Sur*, 365, p. 55.
- Çengel, Yunus, 2008a, ‘Madde, Evreni Açıklamaya Yetmez’, *Zafer*, 374.
- Çengel, Yunus, 2008b, ‘Neden ve Nasıl İlim’, *Altınoluk*, 359.
- Çengel, Yunus, 2008c, ‘Neden ve Nasıl İlim’, *Sızıntı*, 359.
- Çengel, Yunus, 2009, ‘Maddeyi Bir Arada Tutan Tutkal: Kuvvet’, *Zafer*, 385.
- Chavvin, Remy, 1980, ‘Karıncaların Mucizevi Dünyası’, *Zafer*, 39, p. 3.
- Çiğdem, Ahmet, 2004, Batılılaşma, Modernite ve Modernizasyon, in *Modern Türkiye’de Siyasi Düşünce Cilt 3 / Modernleşme ve Batıcılık*, Uygur Kocabaşoğlu (ed.), İletişim, İstanbul.
- Çınar, Osman, 1983, ‘Fizik Kimya Yönünden Dünya’, *Sur*, 87, p. 16-17.
- Comte, Auguste, 1998, *Early Political Writings*, H. S. Jones (ed. and trans.), Cambridge University Press, Cambridge.
- Comte, Auguste, 2001, *Pozitif Felsefe Kursları*, Erkan Ataçay (trans.), Sosyal Yayınları, İstanbul.
- Comte, Auguste, 2008, *İslamiyet ve Pozitivizm*, Dergah Yayınları, İstanbul.
- Çubukçu, Abdullah, 1980, ‘Bin Çeşit Hayvan Var!’, *Sur*, 57.
- Dağlı, Hulusi, 1976, ‘Televizyon ve Biz’, *Sur*, 2, p. 29.
- Dağlı, Hüseyin, 1978, ‘Sinekler’, *Sur*, 24.
- Dânâ, Sâdık, 1991a, ‘Akıl’, *Altınoluk*, 62, p. 24.
- Dânâ, Sâdık, 1991b, ‘Akıl’, *Altınoluk*, 63, p. 24.
- Dânâ, Sâdık, 1991c, ‘Akıl’, *Altınoluk*, 64, p. 24.
- Demircan, Ali Rıza, 1987, ‘Şeytanların Varlığına ve Vesveselerine İnanmak İslam İncasının Gereğidir’, *Altınoluk*, 11.
- Demircan, Kadir, 2000, ‘Homeopathy: Alternatif Tıbbın Farklı Bir Yönü’, *Sızıntı*, 253.
- Demirci, Ali, 2003, ‘Dünyamızı Saran Hassas Denge’, *Sızıntı*, 295.

- Demirci, Mehmet, 1986, M. Akif ve Safahat'ta Tasavvuf İzleri, in *Mehmet Akif Araştırmaları Dergisi*, 1.
- Demirci, Senai, 1997, 'Bilim Tarafsız Değildir', *Zafer*, 243.
- Demiröz, Şenol, 1993, 'Altınoluk Röportaj, Birlik TV Adına Şenol Demiröz'ün Görüşleri: "Türk ve İslam Dünyasını Kucaklayan Bir TV", *Altınoluk*, 89, p. 37.
- Dere, Yıldırım, 1982, 'Yarım Bilgi', *Sur*, 70, p. 4.
- Döğen, Şaban, 1995a, 'Teknikte Son Nokta, Peygamber Mucizeleri', *Sur*, 227, p. 7.
- Döğen, Şaban, 1995b, 'Risalei Nur İlimler Hazinesi', *Sur*, 228, p. 32.
- Dönmez, A. Osman, 2004, 'Mehmet Akif ve Modern İlim', *Sızıntı*, 311.
- Ersoy, M. Akif, 1981, 'Mehmet Akif', *Zafer*, 60, p. 19.
- Erozan, Boğaç, 2009, 'Turkey and the West: A History of Ambivalence', *Orient*, vol. 50, no. 3.
- Ersoy, Mehmet Âkif, 1997a, Cemalleddin Efgani, in *Türkiye'de İslamcılık Düşüncesi Metinler/Kişiler Cilt-I*, İsmail Kara (ed.), Kitabevi, İstanbul, pp. 461-466.
- Ersoy, Mehmet Âkif, 1997b, Tefsiri Şerif, in *Türkiye'de İslamcılık Düşüncesi Metinler/Kişiler Cilt-I*, İsmail Kara (ed.), Kitabevi, İstanbul, pp. 466-468.
- Ersoy, Mehmet Âkif, 1997c, Hasbihal (Maarif Meselesi), in *Türkiye'de İslamcılık Düşüncesi Metinler/Kişiler Cilt-I*, İsmail Kara (ed.), Kitabevi, İstanbul, pp. 493-496.
- Ersoy, Mehmet Âkif, 1997d, Süleymaniye Kürsüsünde, in *Türkiye'de İslamcılık Düşüncesi Metinler/Kişiler Cilt-I*, İsmail Kara (ed.), Kitabevi, İstanbul, pp. 411-433.
- Ersoy, Mehmet Âkif, 1997e, Sa'y ve Amelin Nazarı İslamdaki Mevkii, in *Türkiye'de İslamcılık Düşüncesi Metinler/Kişiler Cilt-I*, İsmail Kara (ed.), Kitabevi, İstanbul, pp. 405-411.
- Ersoy, Mehmet Âkif, 1997f, Asım'dan, in *Türkiye'de İslamcılık Düşüncesi Metinler/Kişiler Cilt-I*, İsmail Kara (ed.), Kitabevi, İstanbul, pp. 433-461.

- Ersoy, Mehmet Âkif, 1997g, Nasrullah Kürsüsünden Türk milletine Hitap, in *Türkiye’de İslamcılık Düşüncesi Metinler/Kişiler Cilt-I*, İsmail Kara (ed.), Kitabevi, İstanbul, pp. 469-516.
- Ersoy, Mehmet Âkif, 1997h, Fatih Kürsüsünden Vaaz, in *Türkiye’de İslamcılık Düşüncesi Metinler/Kişiler Cilt-I*, İsmail Kara (ed.), Kitabevi, İstanbul, pp. 475-586.
- Gönüllü, Ö. Said, 2000, ‘Akupunktur: İğneler ve Sınırlar’, *Sızıntı*, 253.
- Günaydın, Hasan, 1995, ‘Camilerimiz ve Sağlığımız’, *Sur*, 232, p. 40.
- Hallaq, B. Wael, 1984, Was the Gate of İjtihad Closed, *International Journal of Middle East Studies*, Vol. 16, No. 1, pp. 3-41, Cambridge University Press.
- Hançerlioğlu, Orhan, 1995, *Düşünce Tarihi*, Remzi, İstanbul.
- Hanioğlu, M. Şükrü, 1989, *Osmanlı İttihad ve Terakki Cemiyeti ve Jön Türklük*, İletişim, İstanbul.
- Hanioğlu, M. Şükrü, 2008, *A Brief History of the Late Ottoman Empire*, Princeton University Press, New Jersey.
- Has, Polat, 1979a, ‘İlimler ve Canlılar’, *Sızıntı*, 6.
- Has, Polat, 1979b, ‘Mühendislik ve Canlılar’, *Sızıntı*, 9.
- Has, Polat, 1987, ‘Tarihte İlim Anlayışı’, *Sızıntı*, 104.
- Healy, Michelle, 1991, ‘Hastalık Gibi Tedavi’de Allah’ın Taktiridir’, in *Usa Today*, *Sur*, 196, p. 8.
- Heller, H., 1991, ‘Tıp Dünyası Hz. Peygamberin Tavsiyelerine Yönelmeli’, A. Erkan Kavaklı (trans.), *Sur*, 188.
- Hilmi, Ahmed & Ziya Nur Aksun, 2000, *İslam Tarihi-Cilt 1*, Ötüken, İstanbul.
- Hilmi, Ahmed & Ziya Nur Aksun, 2006, *Türkler ve İslam*, Ötüken, İstanbul.
- Hume, David, 1995, *Din Üstüne*, İmge, Ankara.
- Hüseyin, M. Muhammed, 2004, *Modernizmin İslam Dünyasına Girişi*, Sezai Özel (trans.), İnsan Yay., İstanbul.
- İkbal, Muhammed, 1999, *Benlik ve Toplum*, Ali Yüksel (trans.), Birleşik Yayıncılık, İstanbul.

- İkbal, Muhammed, 2002, *İslam'da Dinin Tefekkürün Yeniden Teşükkülü*, Sofi Nuri (trans.), Kırkambar Kitaplığı, İstanbul.
- İqbal, Allama Muhammad, (1977), *The Reconstruction of Religious Thought in Islam*, Hafeez Press, Lahore.
- İşcan, Mehmet Zeki, 1998, *Muhammed Abduh'un Dini ve Siyasi Görüşleri*, Dergah Yay., İstanbul.
- İsmail, Hekimoğlu, 1995, 'Hekimoğlu İsmail ile Röportaj', *Sur*, 226.
- İsmailoğlu, Mustafa, 1976, 'Yıldırım Nasıl Düşer' *Sur*, 5, p. 38.
- Jastrow, Robert, 1983, 'Kompüterler Düşünebilir mi?', *Zafer*, 75, p. 32.
- Kaplan, Faruk, 1985, 'Uçaklar ve Kuşlar', *Sızıntı*, 77.
- Kara, İsmail, 1997b, Bediüzzaman Said Nursi: Hayatı ve Eserleri, in *Türkiye'de İslamcılık Düşüncesi Metinler/Kişiler Cilt:2*, İsmail Kara (ed.), Kitabevi, İstanbul.
- Kara, İsmail, 1998, Ön Bilgiler, in *Türkiye'de İslamcılık Düşüncesi Metinler/Kişiler Cilt:3*, İsmail Kara (ed.), Kitabevi, İstanbul, pp. 16-67
- Kara, İsmail, 2003, İslam Düşüncesinde Paradigma Değişimi Hem Batılılaşım Hem de Müslüman Kalalım, in *Modern Türkiye'de Siyasi Düşünce Cilt 1 / Tanzimat ve Meşrutiyetin Birikimi*, Murat Mehmet Ö. Alkan (ed.), İletişim, İstanbul.
- Kara, İsmail, 2005, İslamcı Söylemin Kaynakları ve Gerçeklik Değeri, in *Modern Türkiye'de Siyasi Düşünce Cilt 6 / İslamcılık*, Yasin Aktay (ed.), İletişim, İstanbul.
- Karabaşoğlu, Metin, 2005, Said Nursî, in *Modern Türkiye'de Siyasi Düşünce Cilt 6 / İslamcılık*, Yasin Aktay (ed.), İletişim, İstanbul.
- Karaman, Hayreddin, 2007a, Efganî, , Abduh, Reşid Rıza, in *Gerçek İslâm'da Birlik*, Hayreddin Karaman, (trans.), İz Yay., İstanbul.
- Karataş, Veli, 2007, 'Bediüzzaman Günümüz İlahiyatçılarına Ne Söyler?', *Zafer*, 363.
- Karatekeli, Emre, 2009, 'Bilim ve Tarih', *Sur*, 400, p. 16.
- Karlıdağ, M., 1994, 'İlâhî Modellerden Beşerî Buluşlara', *Sızıntı*, 183.
- Kavak, Özgür, 2007, Reşid Rıza'nın Hayatı ve Eserleri, in *İttihad-ı Osmanî'den Arap İsyanına*, Klasik Yay., İstanbul.

- Kırca, C., 1981, *Kur'ân-ı Kerim ve Modern İlimler*, Marifet Yay., İstanbul.
- Kırkinci, Mehmet, 1996, 'Mehmet Kırkinci ile Röportaj: Bediüzzaman ve Eğitim', *Sur*, 238, p. 26.
- Kırlıoğlu, Hilmi, 1983, 'Bal Arıları', *Sızıntı*, 52.
- Koçak, Cemil, 2003a, Yeni Osmanlılar ve Birinci Meşrutiyet, in *Modern Türkiye'de Siyasi Düşünce Cilt 1 / Tanzimat ve Meşrutiyetin Birikimi*, Murat Mehmet Ö. Alkan (ed.), İletişim, İstanbul.
- Koçak, Cemil, 2003b, Namık Kemal, in *Modern Türkiye'de Siyasi Düşünce Cilt 1 / Tanzimat ve Meşrutiyetin Birikimi*, Murat Mehmet Ö. Alkan (ed.), İletişim, İstanbul.
- Korkmaz, H. Hüseyin, 1977a, 'Ederden Müessire', *Sur*, 15, p. 17.
- Korkmaz, H. Hüseyin, 1977b, 'Atomlar Konuşuyor', *Sur*, 17, p. 11.
- Korkmaz, H. Hüseyin, 1978, 'Televizyon Kimin Eseridir?', *Sur*, 22-23, p. 34.
- Korkmaz, H. Hüseyin, 1981a, 'Yaşadığımız Dünya Serisi', *Sur*, 62.
- Korkmaz, H. Hüseyin, 1981b, 'Bir Solucandan Diğerine Geçen Kabiliyet', *Sur*, 60.
- Korlaelçi, Murtaza, 1986, *Pozitivizmin Türkiye'ye Girişi ve İlk Etkileri*, İnsan Yayınları, İstanbul.
- Korlaelçi, Murtaza, 2003, Pozitivist Düşüncenin İthali, in *Modern Türkiye'de Siyasi Düşünce Cilt 1 / Tanzimat ve Meşrutiyetin Birikimi*, Murat Mehmet Ö. Alkan (ed.), İletişim, İstanbul.
- Korlaelçi, Murtaza, 2004, *Bazı Tanzimatçılarımızın Pozitivistlerle İlişkileri*, Türk Tarih Kurumu Basımevi, Ankara.
- Köse, Ali, 1986, 'Bilim Din Üzerine Düşünceler', *Sur*, 25, p. 32.
- Kurtoğlu, Zerrin, 2005, Türkiye'de İslamcılık Düşüncesi ve Siyaset, Pozitivist Yönetim İdeolojisinin İslâm'ın Siyasallaşmasına Katkısı, in *Modern Türkiye'de Siyasi Düşünce Cilt 6 / İslamcılık*, Yasin Aktay (ed.), İletişim, İstanbul.
- MacFarlane, Charles, 1850, *Turkey and Its Destiny*, Philadelphia.

- Mardin, Şerif, 1962, *The Genesis of Young Ottoman Thought: A Study in the Modernization of Turkish Political Ideas*, Princeton University Press, New Jersey.
- Mardin, Şerif, 1969, *Religion as Ideology*, Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Ankara.
- Mardin, Şerif, 1989, *Religion and Social Change in Modern Turkey: The Case of Bediüzzaman Said Nursi*, State University of New York Press, Albany.
- Mardin, Şerif, 1993, *Türkiye’de Din ve Siyaset*, İletişim, İstanbul.
- Mardin, Şerif, 2003, *Yeni Osmanlı Düşüncesi*, in *Modern Türkiye’de Siyasi Düşünce Cilt 1 / Tanzimat ve Meşrutiyetin Birikimi*, Murat Mehmet Ö. Alkan (ed.), İletişim, İstanbul.
- Mardin, Şerif, 2006, *Türkiye’de Toplum ve Siyaset*, İletişim Yayınları, İstanbul.
- Mardin, Şerif, 2007a, *Türk Modernleşmesi*, İletişim, İstanbul.
- Mardin, Şerif, 2007b, *Din ve İdeoloji*, İletişim, İstanbul.
- Nalçakan, Metin, 1978, ‘Mikropların Dili’, *Sur*, 25.
- Namlı, Kadir, 1980, ‘En İdeal Isınma’, *Sızıntı*, 12.
- Nazlı, Ahmet, 2007, ‘“Bilimsel Bilgi” Masum Mudur?’, *Zafer*, 364.
- Noyan, O. Faruk, 1998, ‘Bilgi Çağında Teknoloji Krizi’, *Sızıntı*, 228.
- Nurbaki, Haluk, 1987, ‘Radyasyondaki Sır’, *Zafer*, 124, p. 17.
- Nursi, Bediüzzaman Said, 1997b, *Bediüzzaman Kürdi’nin Fihriste-, Makasadı ve Efkârının Programıdır*, in İsmail Kara (ed.), *Türkiye’de İslamcılık Düşüncesi Cilt:2*, Kitabevi, İstanbul, pp. 481-498.
- Nursi, Bediüzzaman Said, 1997a, *Mucizeler ve Yeni Keşifler*, in İsmail Kara (ed.), *Türkiye’de İslamcılık Düşüncesi Cilt:2*, Kitabevi, İstanbul, pp. 463-469.
- Oktaç, M. Deniz, 1982, ‘Doktor ve Hasta’, *Sur*, 79, p. 42-43.
- Osmanlı, Arif, 2008, ‘Zırhlı Böcekler’, *Sızıntı*, 34.
- Parla, Jale, 2003, *Tanzimat Edebiyatında Siyasi Fikirler*, in *Modern Türkiye’de Siyasi Düşünce Cilt 1 / Tanzimat ve Meşrutiyetin Birikimi*, Murat Mehmet Ö. Alkan (ed.), İletişim, İstanbul.

- Parla, Taha, 1985, *Social and Political Thought of Ziya Gökalp*, E. J. Brill, Leiden.
- Polatgöz, M. Sami, 1991, 'Bilimin Hayat Adına Vadettikleri', *Sızıntı*, 148.
- Polatöz, Sami, 2008, 'Enerji Üretim Verimliliğine İlham Kaynağı: Balıklar', *Sızıntı*, 34.
- Rahman, Fazlur, 1966, *Islam*, Weidenfeld and Nicolson, London.
- Rahman, Fazlur, 1984, *Islam & Modernity*, The University of Chicago Press, Chicago.
- Ramazan, Tarık, 2005, *İslâmî Yenilenmenin Kökenleri*, Ayşe Meral (trans.), Anka Yay., İstanbul.
- Ramazanoğlu, M. Sâmi, 2002, 'İlmin Faziletleri', *Altınoluk*, 199, p. 30.
- Rampton, Sheldon & Stauber, John, 'Bilimsel Yöntem Efsanesi', *Zafer*, 361.
- Rıza, Reşid, 2007a, *Gerçek İslam'da Birlik*, Hayreddin Karaman (trans.), İz yayıncılık, İstanbul.
- Rıza, Reşid, 2007b, *İttihad-ı Osmanî'den Arap İsyanına*, Özgür Kavak (trans.), Klasik Yay., İstanbul.
- Şahin, Hamit, 2007, 'Aşı Nedir', *Sur*, 370, p. 54.
- Şahiner, Necmettin (ed.), 1979, *Said Nursi ve Nurculuk Hakkında Aydınlar Konuşuyor*, Yeni Asya, İstanbul.
- Saltabaş, Lütfü, 'Teknik ve İnsan', *Zafer*, 43, p. 13.
- Saltabaş, Lütfü, 1980, 'Teknik ve İnsan', *Zafer*, 43, p. 13.
- Sarsılmaz, Arif, 2000, 'Alternatif Tıp ve Ahlâk', *Sızıntı*, 253.
- Sarsılmaz, Arif, 2006, 'Sızıntı Mektebi', *Sızıntı*, 326.
- Saygılı, Sefa, 1988, 'Sigara Nasıl Bırakılır', *Sur*, 145, p. 38.
- Saygılı, Sefa, 2005, 'Ergenlikte Spor', *Sur*, 350, p. 34.
- Schlick, Moritz, 1966, *The Turning Point of Philosophy*, David Rynin (trans.), in *Logical Positivism*, Ayer, A. J. (ed.), The Free Press, New York, pp. 53-59.
- Schlick, Moritz, 1999, *Positivism and Realism*, in *The Philosophy of Science*, Richard Boyd et al. (eds.), MIT Press, London.
- Sencer, Faruk, 1989, 'Madde Görünenden İbaret Degil', *Zafer*, 145, p. 8.

- Şeriati, Ali, 1992, *İslam – Bilim*, Faruk Alptekin (trans.), Nehir Yay., İstanbul.
- Şirin, Cenap, 1985, ‘Erişilmez Teknoloji’, *Sur*, 109, p. 4.
- Şirin, Cenap, 1993, ‘Televizyon’, *Sur*, 202, p. 8.
- Şirin, Veli, 1986, ‘20. Yüzyıl ve İslâm'ın Gücü’, *Altınoluk*, 5, p. 6.
- Sitembölkübaşı, Şaban, 1995, *Türkiye’de İslamın Yeniden İnkişafı (1950-1960)*, Türkiye Diyanet Vakfı Yayınları, Ankara.
- Songar, Ayhan, 1984, ‘İlk Patlama’, *Zafer*, 85.
- Suavi, Cüneyd, 1978, ‘Sivrisinek Cerrah mi?’, *Zafer*, 14, p. 13.
- Tabanlı, Mustafa, 2006, ‘Bilim ve İlahiyat Nobeli Bir Arada: Charles H. Townes’, *Sızıntı*, 331.
- Thuan, Trinh, 1989, ‘Amerikalı Astro-Fizikçi ile Röportaj: Tesadüf Asla Mümkün Değildir’, *Sur*, 157.
- Toker, Nilgün & Tekin, Serdar, 2004, Batıcı Siyasi Düşüncenin Karakteristikleri ve Evreleri, in *Modern Türkiye’de Siyasi Düşünce Cilt 3 / Modernleşme ve Batıcılık*, Uygur Kocabaşoğlu (ed.), İletişim, İstanbul.
- Topçu, Nurettin, 1998, *Mehmet Âkif*, Dergah, İstanbul.
- Toprak, Zafer, 2003, Osmanlı’da Toplumbilimin Doğuşu, in *Modern Türkiye’de Siyasi Düşünce Cilt 1 / Tanzimat ve Meşrutiyetin Birikimi*, Murat Mehmet Ö. Alkan (ed.), İletişim, İstanbul.
- Torun, Ali, 1987, ‘Ay Teorisi’, *Sur*, 133, pp. 20-21.
- Truan, Trinh, 1989, ‘Amerikalı Astro-Fizikçi Trinh Truan ile Röportaj’, *Sur*, 157.
- Türköne, Mümtaz’er, 1991, *Siyasal İdeoloji Olarak İslamcılığın Doğuşu*, İletişim, İstanbul.
- Ülken, Hilmi Ziya, 2000, *İslam Düşüncesi*, Ülken Yayınları, İstanbul.
- Uluçay, Mustafa, 1981, ‘İnsan Nedir Ne Değildir’, *Sur*, 64, p. 40.
- Ünal, Levent, 1980, ‘Kompüter ve İnsan’, *Sur*, 51, p. 9.
- Ünsal, Fatma Bostan, 2005, *Mehmet Akif Ersoy*, in *Modern Türkiye’de Siyasi Düşünce Cilt 6 / İslamcılık*, Yasin Aktay (ed.), İletişim, İstanbul.

- Vakkasoğlu, Vehbi, 1983, *İslâm Şairi Mehmet Akif*, Cihan Yay., İstanbul.
- Vural, Ahmet, 1986, 'Kar Mucizesi', *Sur*, 118, p. 1.
- Vural, Ahmet, 1987, 'Sakal Mucize mi?', *Sur*, 131, p. 22.
- Yalçinkaya, Alaeddin, 1991, *Cemaleddin Afgani ve Türk Siyasî Hayatı Üzerindeki Etkileri*, Osmanlı Kitabevi, İstanbul.
- Yalçinkaya, Ayhan, 2003, *Küf: Dede Korkut, Said Nursi ve Hz. Ali Üzerine bir Yorumsama*, Alan, İstanbul.
- Yavuz, Hilmi, 2000, *Modernleşme, Oryantalizm ve İslam*, Büke Yay., İstanbul.
- Yavuz, Hilmi, 2004, *Modernleşme: Parça mı, Bütün mü? Batılılaşma: Simge mi? Kavram mı?*, in *Modern Türkiye'de Siyasi Düşünce Cilt 3 / Modernleşme ve Batıcılık*, Uygur Kocabaşoğlu (ed.), İletişim, İstanbul.
- Yavuz, M. Hakan, 2005, *Bediüzzaman Said Nursi ve Nurculuk*, in *Modern Türkiye'de Siyasi Düşünce Cilt 6 / İslamcılık*, Yasin Aktay (ed.), İletişim, İstanbul.
- Yavuzoğlu, Selim, 1983a, 'Çözülemeyen Nağmeler: Kuş Sesleri', *Sızıntı*, 53.
- Yavuzoğlu, Selim, 1983b, 'Çağları Aşan Harika Mimarlar', *Sızıntı*, 57.
- Yenikaya, Bayram, 1997, 'Tabiatın Matematik Düzeni', *Sızıntı*, 223.
- Yeprem, Saim, 2007, 'Altınoluk Röportaj: Gen Teknolojisi ve İslam', *Altınoluk*, 256, p. 13.
- Yıldırım, Selçuk, 1979, 'Tabiattaki Mekanizmaları Taklit Eden Bilim: Biyonik', *Zafer*, 26, p. 12.
- Yıldırım, Selçuk, 1980, 'Esrarlı Bir Kuvvet Yerçekimi', *Zafer*, 41, p. 12.
- Yıldırım, Serdar, 2008, 'Batı'nın "Big Bang" Deneyi veya Atomaltında Allah'ı Aramak', 273, p. 16.
- Yıldırım, Suat, 1979, 'Tevrat, İncil, Kur'an ve İlim', *Sızıntı*, 4.
- Yıldırım, Suat, 1987a, 'Kur'an-ı Kerim ve Fenni Keşifler (1)', *Sızıntı*, 101.
- Yıldırım, Suat, 1987b, 'Kur'an-ı Kerim ve Fenni Keşifler (2)', *Sızıntı*, 102.
- Yıldırım, Suat, 1992, 'Kur'an Işığında Big Bang Teorisi', *Altınoluk*, 76, p. 38.

- Yüksel, Edip, 1991, *Zafer ve Sur Dergilerine Bir Uyarı*, in *Ayet ve Slogan*, Ruşen Çakır, Metis, İstanbul.
- Zafer Araştırma Grubu, 2007, 'Evren, Bilim Ve İnanç', 366.
- Zarifioğlu, Alaeddin, 1986, 'Din ve Fen', *Zafer*, 114, p. 14.
- Ziyaoğlu, Rafet, 1979, 'Göremediğimiz Varlıklara Yok Diyebilir miyiz?', *Sur*, 38, p. 11-13.
- 'Basit Görülen İşlerdeki Hârikuladeliik', 1985, in *Science 85*, Mehmed Sami Polatöz (trans.), *Sızıntı*, 81.
- 'Bir Tilki Yuvasındaki Hayat', 1980, Münir Doğruluk (trans.), in *Wildlife*, *Zafer*, 41, p. 20.
- 'Doktorum Nerede', 1994, *Sur*, 224, p. 54.

APPENDIX

Figure 1: ‘The science points the God’, April 1986 in <i>Sur</i>	71
Figure 2: ‘Finding the utterance of God by means of Chemistry’, June 1986, <i>Zafer</i>	72