

## Is a system of compensation for the donation of human organs ethically justified? Focused on South Korea.

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### Abstract

**Unlike the donation of blood or eggs, when a living person donates one of their organs it has the potential to impact the life of the donor. I think that a reasonable compensation system should be established for the donation of organs. I believe that establishment of an effective compensation system for human organs would prevent human-organ purchases and to be practically helpful for organ procurement. Currently, the relative level of compensation for human organs is very low in South Korea. On the other hand, Gimhae-city in South Korea has a relatively strong compensation ordinance for organ donation, both for living donations as well as those made after death. In this paper, I discuss the compensation system for human organs in Gimhae-city, and attempt to search for an ethical justification for such a system.**

**Keywords:** Actual compensation for eggs, Blood donation voucher, Medical ethics, Organ donation, Compensation system for human organs.

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### Introduction

I believe that the establishment of an effective compensation system for human organs can prevent human-organ purchases and be practically helpful for organ procurement. In regards to deceased or brain-dead donor, the organs donated most frequently are the five main organs (kidney, liver, pancreas, heart, and lung), as well as bone marrow and the cornea. In the case of a living donor, the organs donated most frequently are those that can be extracted without significant long-term impact to the donor's body. In the case of a living donor, organ donation is similar to blood donation in that the organs that are donated are not essential for the donor's life. In most countries, blood is donated as a gift and thus no compensation is provided to the donor, whereas in South Korea (Republic of Korea), human egg donors are provided with actual compensation. I consider that it is fair to prepare a reasonable compensation system for organ donors on the premise that human-organ purchases should be prohibited. Gimhae-city in South Korea has a compensation system for human organ donation, both for living donations as well as those made after death. I discuss the compensation system of Gimhae-city, and attempts to search for an ethical justification for this system through an analogy with the compensation systems for blood and human egg donation and a discussion of how organs operate as public goods. First, I will consider the compensation system for human organs on the premise that human-organ purchases should be prohibited in South Korea.

### The Relatively Low-level of Compensation for Human organs in Korea Based on the Premise that Human-Organ Purchases should be Prohibited

The first kidney transplant from a living donor was conducted in

South Korea in 1969. The first organ transplant from brain-dead patient was performed in 1979, and thereafter, human organ transplant technology has rapidly advanced, to the point that about 19,000 organ transplants had been performed in South Korea by the end of 1998. During this time, many social issues were raised related to human organ extraction and human organ transplantation, including the illegal trafficking of human organs and ethical and legal issues regarding the definition of brain dead. "The law on the transplantation of organs," established in 1999 and applied since 2000, was designed to provide an institutional strategy that would fairly and efficiently manage human organ donors and the subjects of transplantation, eradicate illegal human-organ purchases, and protect legal organ transplantation. On this basis, the Republic of Korea (South Korea) government established the "National Organ Transplantation Management Institution" and the "National Organ Transplantation Management Center" within the "National Medical Center". The "National Organ Transplantation Management Center" was transferred to the "Korea Centers for Disease Control and Prevention" on April 2, 2010 [1]. On the other hand, to strictly control human-organ purchases, the Republic of Korea (South Korea) government established strict criminal penalties, such as the person directly involved in human-organ purchases faces a prison sentence of more than 2 years. The organ transplantation law prohibits any commercial human-organ purchase activity. Furthermore, the organ transplantation law also prohibits instigation as well as aiding and abetting activity clause 7). Purchase activity means giving or receiving organ or making a promise to with the condition of exchange or promise for exchange of cash, profit in property or other benefit in return (clause 7). The organ transplantation law allows no exceptional regulation about human-organ purchases activity [2].

Currently, the only legal way to find organs available for donation in South Korea is through the "Korean Network for Organ

Sharing (KONOS)” a national organ transplant management center. There is a practical reason for why most countries currently maintain transplantation systems that depend strictly on pure organ donation. Eol Lee and Sung-Don Kim explain that the reason for this is that it is not easy to distinguish between “reward” and “compensation” [3]. Currently, organ beneficiaries in South Korea are prohibited from even voluntarily providing their organ donors with a reward. Of course, the Republic of Korea (South Korea) government currently returns rewards in the form of a paid vacation for the human organ donor from the company the donor works for. The South Korean law about transplantations including organs, clause 27-2 (Support to donor including organ, established in 8.4.2011, law 11005): The Korean government can pay the person who corresponds to one of the following categories for funeral costs, medical expenses, and stop-tear money, etc.: (1) Donor of organ; (2) Family or surviving family of donor of organ; and (3) Employer of worker who is the donor of the organ. In the case of a worker who is the donor of an organ that donates the organ without designating a transplant patient, for the hospitalization period required for medical checkup or extraction, the head of the worker who is a civil servant must consider it as sick leave, or the employer of the worker who is not a civil servant must consider it as paid vacation. The South Korean law about transplantations including human organs, clause 27-2 (Support to donor including human organ, established in 2011): The South Korean government can pay the person who corresponds to one of the following categories for funeral costs, medical expenses, and stop-tear money, etc.: (1) Donor of organ; (2) Family or surviving family of donor of organ; and (3) Employer of worker who is the donor of the organ. In the case of a worker who is the donor of an organ that donates the organ without designating a transplant patient, for the hospitalization period required for medical checkup or extraction, the head of the worker who is a civil servant must consider it as sick leave, or the employer of the worker who is not a civil servant must consider it as paid vacation. The Republic of Korea (South Korea) government supports a pre-examination fee (approximately 1.5 million won) and a post-checkup fee (approximately, 0.7 million won) only for pure donation by the living, and funeral costs, medical expenses, and stop-tear money (approximately, up to 5.4 million won) for post-death donations. In addition, as mentioned above, there is a regulation regarding paid vacation for organ donors. That is, the worker/donor’s required period of hospitalization for medical examination and/or extraction is treated as a paid vacation, with the country paying the employer from the vacation compensation fund (provided for by the organ law, clause 32, etc.). Support for hospitalization period (up to 14 days) × donation worker’s daily taxable income (up to approximately 0.12 million won), and pay the medical examination fee for the donor of organ. The Republic of Korea(South Korea) government also pays for the regular checkup fee for 1 year after transplantation for pure donors, as well as the pre-examination fee in cases where the transplant could not be done (The South Korean organ law, clause 32, and the enforcement rule 26). In the case of a pure living donor, according to the established rule for human organ, clause 3, the item 2-1, regular medical checkup fee for the liver within approximately 0.7 million won, or for the kidney, the

pancreas, the islet, and the small intestine within approximately 0.6 million won is supported.

However, these support mechanisms in and of themselves are not attractive enough to make most South Koreans think that volunteering to be an organ donor is a worthwhile endeavor. According to the report of South Korea’s Yonhap News, the waiting time of those who hope for human organ transplantation has gradually increased, and now the average waiting time for transplantation is over 3 years and 9 months (compared to 2 years and 9 months in 2009, and 3 years and 1 month in 2013). In addition, aftercare for human organ donors is rather insufficient in South Korea. There is no prepared healthcare guide after organ donation, as aftercare is voluntarily performed by medical institutions. Further, the 6 months to 1-year period granted for aftercare is rather short. In addition, there are no guidelines or support to address sequela, which may occur after donation. Instead, only post transplantation results are directed to be reported to KONOS (Korean Network for Organ Sharing) [4]. As such, a related database of aftercare for donors has not been constructed. In regards to post healthcare for donors, follow-up monitoring of organs of donors is required for 2 years in the United States, and is also mandatory in most countries including the United Kingdom. In comparison, the level of post healthcare for donors is very low in South Korea.

I think that the country with the most powerful compensation system for human organs is Iran. Iran pays kidney donors a compensation fee of \$1200. Approximately 20,000 transplants have been performed in Iran, and there are virtually no patients who must wait for a kidney transplant in Iran. It is impossible for brokers of human-organ purchases to exist in a system such as Iran’s. However, Long time after, dissatisfaction of some donors is reported for this monetary compensation. In addition, 84% of kidney donors are among the poor [5]. But, this paper does not recommend a compensation system for human organs as powerful as Iran’s. Instead, the case of Iran was introduced to emphasize the fact that when a country supports kidney donors with monetary compensation, as does Iran, brokers for kidney purchases disappear and those who must wait for kidney transplants also disappear, as they did in Iran. On what basis can we justify a reasonable compensation system for human organs, instead of the powerful compensation system for human organs in Iran? To answer this question, the next section of this paper will consider compensation for blood donors and egg donors in South Korea.

## **The System of Compensation for Blood and Human Egg Donors in South Korea**

### ***Gifts to blood donors and the blood donation voucher***

Currently, the Blood Management Headquarters of the Korean Red Cross is provided with blood in exchange for gift certificates, movie tickets, or other various goods such as Chocopies (Famous cake-shaped confectionery in Korea), umbrellas, nail picker sets, free hamburger coupons, and free coffee coupons. These souvenirs for blood donation vary by region. Sometimes, these goods are converted into blood donation vouchers by calculation of their cash value. A blood donation voucher is a donation system by which a blood donor donates the price

appropriated for souvenirs from blood donation to a charity of the donors choosing instead of receiving souvenirs. This is done in order to establish a sound blood donation culture and to foster a donation culture in relation to blood donation [6]. A blood donation voucher can be received by selecting “voucher (charity works)” as “a souvenir for blood donation” after blood donation. A donor can receive a voucher corresponding to approximately 3500 won (It costs about 3500 won when converted to USD about 3.2 \$) for the whole blood donation and plasma component donation, or 6000 won (about 5.5 \$) for a platelet donation. In addition, a receipt of donation can be issued to whomever the donor wishes. However, the voucher needs to be registered to the homepage, and a voucher without registration is anonymously donated, and does not appear in the “My donation list” on the homepage. The Blood Management Headquarters also collects donations through the voucher, and once collection is finished, the collected prices are sent to each charity. Charity works selected for the donated blood donation vouchers in 2013 were (1) Support of wells and sanitary facilities to the countries that lack water (by Korean Red Cross, Seoul branch); (2) Support of medical expenses to pediatric patients with leukemia and pediatric cancer among the most vulnerable, and of a healing camp for the pediatric patients (by Korean Association for Children with Leukemia and Cancer); (3) Support of dental treatments to the handicapped and the medically underprivileged among the most vulnerable (Incheon Red Cross Hospital, Hope Care Center); and (4) Support of medical expenses to patients with leukemia in the low income class (Korea Association of Leukemia Patients) (Korean Red Cross, the Blood Management Headquarters [7].

One thing that needs attention is that the blood of a donor is calculated as a “price.” Of course, the “price” is not paid in cash. Instead, the souvenir corresponding to the donated blood is given, or a tax privilege is received, through the blood donation voucher. The compensation given to blood donors by the Blood Management Headquarters is not viewed as a purchase. Korean society simply considers it as a token of appreciation to the blood donor. I think that human organ donors, as well as blood donors, should have the same right. I believe that organ donors should also receive souvenirs or a tax privilege through a human organ donor voucher system by calculation of the human organ “price” (the donor should not directly receive cash). This would create a more respectful treatment of human organ donors [8].

#### ***Rules of compensation for egg donors in South Korea***

The present law in the area of reproductive care in South Korea regulates that monetary compensation should be provided for human egg donation. Medical institutions for embryo creation pay egg donors for the items donated, including monetary compensation for the time required for operation and recovery for human egg donation, transportation fare, etc., with the amount of compensation provided for by the ordinance of the Ministry for Health, Welfare and Family Affairs. South Korea has thus opened a way for the law to require that human organ donors be provided with monetary compensation for the time required for operation and recovery after the human organ donation, including transportation fare, etc. That is, the law on transplantation of human organ has prepared a basis of support

for donors. However, it is difficult to consider that the law is practically effective, as reviewed above [9].

South Korea gives blood donors souvenirs and vouchers. In addition, it is stipulated that human egg donors are paid for the expenses (transportation fare, etc.) and the time required for human egg donation by converting the expenses and time to a monetary price. On this basis, human organ donors are also given small souvenirs. However, human organ beneficiaries are responsible for the medical bills spent for human organ donation, and there is no regulation requiring payment of an economically calculated price in compensation for human organ donation. It is necessary to have follow-up studies on this issue, and improvement of the law also appears to be necessary. In the next section, the ordinance on the promotion of registration for human organ donation in Gimhae-city will be introduced and discussed as an example of a compensation system for human organs in South Korea.

#### **The Ordinance Promoting Organ Donation in Gimhae-city, South Korea**

Gimhae-city in South Korea established an ordinance for the promotion of human organ donation in November 2009. The Promotion Committee of Gimhae-city Organ Donation Movement, composed of 12 members from civil organizations, religious organizations, and physicians, headed by Byoung-Ho Lee, Deputy Mayor, held the committee meeting in a public health clinic to bring attention to human organ donation and encourage voluntary participation by citizens in the registration for human organ donation. The Committee prepared an enforcement regulation that awards various incentives to people who pledge organ donation to Gimhae-city, or provides organ either while alive, after death, or while brain-dead. To promote of human organ donation, Gimhae-city does the following for human organ donors: the City reduces medical expenses in public health clinics and parking fees in public parking lots for living people, and exempts the crematorium fee of Gimhae Memorial Park and reduces the cinerary fee after death to 50%. In addition, Gimhae-city has set a rule to pay up to approximately 10 million won of stop-tear money to organ donors [10]. In addition, the enforcement regulation of Gimhae-city set rules that award various incentives to citizens who pledge to donate organs, including exempting their deductible for medical expenses at public health clinics, and exempting them from the entrance fee for the Royal Tomb of King Suro and for the Gimhae Astronomical Observatory, and reducing the parking fee in public parking lots to 50%. In addition, funeral costs (up to approximately 2 million won), pre-examination fees for intended donors (up to approximately 7 million won out of the deductible), and stop-tear money for families (up to approximately 1 million won) are all to be paid for organ donation by brain-dead patients.

After implementation of this ordinance, Gimhae-city held supported funeral costs and payment of stop-tear money to the survivor families of deceased or brain-dead organ donors, and sent fixed amounts of stop-tear money for two cases in August 18, 2009. A Kim (born in 1967), a citizen of Gimhae-city, became brain-dead as a result of a workplace accident in June 2009, and A Choi (born in 1981) became brain-dead as a

result of a car accident in July 2009. According to the wishes of the deceased, who had paid much attention to human organ donation, organs were donated by agreement with the survivor families, and eight patients received transplants (including liver, heart, and kidney) and were able to live new lives due to the precious donations of the two persons who chose to share the gift of life. According to the decisions of the Committee, Gimhae-city sent an amount of stop-tear money (approximately 2 million won of funeral cost, and approximately 1 million won of stop-tear money).

There has been no discussion in South Korean academia on the validity of compensation under the ordinance of Gimhae-city. It is necessary to have a follow-up discussion if the compensation for human organs of Gimhae-city can be shared throughout the entire Korean society. Leaving these issues for a future discussion, the next section of this paper will discuss the ethical justification, if any, for a compensation system for human organs.

### **The Search for an Ethical Justification for the System for the Compensation of Human Organs in Gimhae-City in South Korea**

Human-organ purchases are legally prohibited in South Korea. However, while payment of rewards for human organ donation (Human-organ purchases) is unethical, compensation for organ donation can be ethical. Eol Lee and Sung-Don Kim mentioned that a national institution can distinguish between reward and compensation, and said as follows: The country, the third party, must directly verify altruism of donor, and confirm that no transaction exists between donor and beneficiary. In other words, the country must watch the process of organ transplantation as an intermediary of organ transplantation, and give compensation as an acknowledgement of the expression of altruism by donor. Thereby, instead of receiving reward from beneficiary, the donor receives an award from the country for donation of one's own organ. For the contents of compensation money, a work will be required to calculate the precise amount as medical expense and stop-tear money, as defined in the law...Centered by donor, if it is limited to the expense required for organ donation by donor, and a general stop-tear money for sequela, or if the future expense for transplantation of donor is considered, appropriate amounts of compensation will be able to be calculated [3].

As mentioned above, Eol Lee and Sung-Don Kim insist that it is necessary for the country to compensate for organ donations as well. When the country appropriates private property, the country pays compensation in an appropriate amount of money. It appears to be reasonable to award the person who donates his/her organ to the National Organ Transplantation Management Center, compensation corresponding to his public activity. The Korean government gives awards to people who have saved lots of money in the bank or did good deeds by helping others. As such, it is ethical to also properly treat the people who sacrifice part of their own body for others.

From old times, philosophers and moralists have proposed that ethical activity should be accepted universally across all perspectives. Stoic philosophers (Stoics) insisted that ethics originate from the universal law of nature. The great

German philosopher Kant developed these thoughts into his famous formulation, which stated, "act only in accordance with that maxim through which you can at the same time will that it become a universal law". Kant's ethical theory was modified and developed by philosopher Hare, and Hare viewed universalizability as a reasonable characteristic of moral judgment [11]. Despite differences between Continental philosophers and English/American Philosophers, they agree that ethics is universal. Moral philosopher James Rachels called satisfactory moral theory as ethics without false pride, or shortened as MWH (Morality without Hubris) [12]. MWH was made by combination and removal from many ancient moral theories. For the principle of action, MWH was combined with two ideas: (1) We should act to equally promote the good of all people, and (2) we should treat people in a way that they deserve to be treated in consideration of the fact that they chose to act for themselves. Rachels said through MWH that one who treats others well, obtains the right to be treated well by them as a reward, but one who treats others badly obtains the right to be treated by them badly as a reward [12]. Rachels considered the one who helped others in trouble as a special person who obtained respect and gratitude from other members of the society, due to his/her previous action. On the contrary, he viewed that it is not unethical if one does not help a person who did not help others in trouble. According to Rachels' moral theory without false pride (MWH), the one who did a precious thing for others should be properly treated in society. I find no ethical inappropriateness from awarding gifts or compensation, to a socially accepted degree, to those who donate organs while alive or after death. If compensation for those who donate organs is unethical, then the blood donation voucher system or the system of monetary compensation for egg donors in Korea would be also unethical.

On the other hand, human organs are considered public goods in South Korea. On the homepage of KONOS, the National Organ Transplantation Management Center of Korea, it is clearly written that since organ share public goods, it is appropriate that the country should intervene with active regulatory policy in order to improve the quality of life of the public through the discovery of potential brain-dead patients and the fair distribution of organs from brain-dead patients [4]. It means goods or facilities shared by the general public, which are provided by the public sector and enjoyed by all people in common, such as goods, roads, rivers, and ports. Public goods mean goods or services that once produced by an economic subject, all members can enjoy the consumption benefit. Its economic characteristics are non-rivalry and non-excludability. Due to its characteristics, providers of public goods are mostly public institutions or publicly owned companies such as national governments or local governments [13].

To determine whether goods are public or private, depends on whether consumption of the goods can be excluded or not. If organs are public goods, it is impossible to exclude consumption of the goods. In contrast, if organs are considered as private goods, consumption of the goods can be excluded. Through this reasoning, it becomes apparent that the cause of imbalance between the supply and demand of human organs is because organs are managed as public goods yet viewed as private

goods. If human organs were considered absolute private goods, imbalance between supply and demand would not happen, because the capitalist market would solve these kinds of issues. In addition, even if human organs are considered absolute public goods, imbalance between supply and demand would not happen, because the country would be in charge of the supply of human organs. If human organs were public goods, a limited intervention by the country on the individual's body would be justified as mentioned before. By the way, the country has already intervened with a definition that human organs are public goods. However, the country previously intervened with a view that human organs are public goods, and changed its stance later to view organs as private goods. The individual recipient of an human organ should bear the expense of transplantation for the reason that he/she needs the human organ. However, if the human organ is considered a public good, then the country should bear the human organ recipient's organ transplantation expenses, if possible. In addition, compensation to the individual who donated the human organ should be enhanced. In general, these measures would provide a consistent policy stance on human organ donation if organs are to be considered.

The Korean government pays rewards with taxes collected from people in many areas. In particular, the country multilaterally pays rewards for diseases and prevention of diseases, including the four main severe diseases, with health insurance funds collected from people in the health and medical treatment area. Other than that, The Korean government pays rewards for people's education in elementary school. The Korean government also pays rewards for the construction of roads or ports. In addition, The Korean government runs fire stations in preparation for fires, and the operating expenses are also paid with taxes from people. The Korean government has public servants in the Ministry of Health and Welfare, members of the National Assembly, or other public offices, and pays rewards for their works. As such, The Korean government already has been paying rewards in many areas. In regards to organs, since a person who provides an organ for donation is necessary in order to treat a failing organ in another, it is fair to give a certain level of compensation to the donor. In other words, in the same way that a person who provides blood is given a certain level of compensation (or a gift), it is very ethical to award reasonable compensation (or a gift) to the one who gives something even more difficult to provide than blood.

### Conclusion

If, in advocating for a compensation system for the donation of human organs, the one to whom we need to appeal is a person who reasonably pursues his/her profit in capitalistic society, it could be worrisome that the reality would be a purchase (as the country purchases organs), while the form is compensation. However, the Blood Management Headquarters of the Korean Red Cross currently collects blood and provides nothing more in return other than various inexpensive goods such as gift certificates or movie tickets. However, no Korean people consider this form of blood donation compensation to be a purchase. Furthermore, the Blood Management Headquarters of the Korean Red Cross have systematized blood donation, in that when blood is donated without receiving a souvenir, people can

convert the corresponding price to a donation voucher. Further, as reviewed above, Gimhae-city provides several incentives, including cash, to those who donate organs. However, those who donated organs and receive compensation from Gimhae-city are not blamed for having "sold corpses to Gimhae-city," or for deciding to donate their organ for the purpose of tax benefits, benefits of using public facilities, or receiving compensation. This is much like human egg donation in that when an egg is provided for research, and monetary compensation and transportation fare are paid, it is not considered that the country has purchased the human egg. If monetary compensation for the egg donor in the clause 15-4 of the Bioethics and Safety Act cannot be interpreted as a legal provision for the purchase of human eggs by the Korean government, in the same manner, then a compensation rule on human organs also would not be viewed as a legal provision for the purchase of organs. It is also fair to say that the compensation provided by the Korean government for human organ donation would be the same amount of money that would be saved by the human organ transplantation. In addition, an incentive would be fair rather than a price. In any case, a form of monetary respect would rather be better than, for example, a reduction of the health insurance fee to 5% or the public transportation fare to 5% during the lifetime. For pure human donors who do not receive this form of compensation, it would be fine to give an option to choose a voucher, which could be used as a form of charity as in the case of blood donation.

I think that it is not unethical for the Korean government to compensate organ donors at the level of Gimhae-city, which has paid rewards as compensation for human organs. In addition, other levels of compensation could be considered, depending on public opinion regarding the system of compensation for the donation of human organs in Korean society. It is also thought that there would be no ethical problem if such a system was implemented in other countries. Thinking of the issue in this way, there is little chance that people would criticize the system of compensation as being a system of human-organ purchasing. In this paper, I reviewed the system of compensation for the donation of human organs in Gimhae-city, and attempted to ethically justify the system through the moral theory of James Rachels, which emphasizes universality. Thereafter, the system of compensation for the donation of human organs was ethically justified by comparing compensation for human organ donation to similar compensatory systems for blood and human egg donation and through describing human organs as having the characteristics of public goods. No matter which country implements the system of compensation for the donation of human organs, such a system would be practically helpful for organ procurement.

### References

1. Korea Center for Disease Control and Prevention. Introduction of Organ Transplantation Management Center. Seeds of Hope Policy Magazine. 2011.
2. Joo HN. Regulations and issues on donation by living person. Bioethics forum. 2012;1(4).
3. Lee E, Kim SD. Review on human-organ purchases crime and compensation system. Seonggyungwan Law. 2009;21(21):2.

4. [www.konos.go.kr](http://www.konos.go.kr)
5. Ghods A, Savaj S. Iranian model of paid and regulated living-unrelated kidney donation. *Clin J Am Soc Nephrol.* 2006;1(6):1136-45.
6. Kim HT. Study on the ethical justification of the organ transplantation in Korea. *HUFS Law.* 2003.
7. [http://www.bloodinfo.net/donation\\_ticket\\_intro.do#area\\_contents](http://www.bloodinfo.net/donation_ticket_intro.do#area_contents)
8. Jeong C. Moral debating on the sale of human organs and the compensation system for human organs- under regulating the sale of human organs. *Korean Journal of Medicine and Law.* 2013;21(2):29-55.
9. Kim JH. Legal issues of body organ transplantation. *Korean Society of Bioethics Fall Meeting Sourcebook.* 2003.
10. Park EJ. Law ethics of brain-death and organ transplantation. *Philosophy and Reality.* 1992.
11. <https://ko.wikipedia.org/wiki/%EA%B3%B5%EA%B3%B5%EC%9E%AC>
12. Rachels J. *The Elements of moral philosophy.* McGraw Hill, 1986.
13. <http://ko.wikipedia.org/wiki/%EA%B3%B5%EA%B3%B5%EC%9E%AC>

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