Making RealDolls regulation at the border work

Jisoo Yi
Dankook University - Jukjeon Campus, Yongin, Republic of Korea, and
Jun Hee Lee
Grinnell College, Grinnell, Iowa, USA

Abstract

Purpose – In an effort to reduce ambiguity around customs clearance of items deemed pernicious to public morality and present lessons for customs administration, this research aims to explore ways to improve customs clearance for RealDolls. Furthermore, by suggesting specific ideas to improve the process, this research also aims to contribute to the future customs clearance of socially controversial and legally ambiguous items.

Design/methodology/approach – The authors have decided to review studies from ethical and legal perspectives to focus on the legislation and its enforcement issues. The literature review is designed to provide insights on how to incorporate legal and ethical reasoning in the customs clearance process for RealDolls. Supplementary interviews were also conducted with criminal lawyers and customs officials to obtain expert knowledge on domestic legislation and customs control against the sex toys industry.

Findings – As a result of the study, it is found that a complete ban on RealDoll infringes on individuals’ right to pursue happiness guaranteed by the Constitution and in most cases, cannot be implemented without loopholes. Therefore, it is suggested that the import regulation on RealDolls should be changed to the negative list system, which selectively disapproves certain RealDolls based on a list of RealDolls previously denied clearance by either the Supreme Court or the Customs Clearance Screening Committee. In addition, to have sufficient ethical and legal grounds, it is necessary to expand research on RealDolls regulation and actively introduce the process of obtaining social consensus.

Originality/value – There has been little discussion on regulating RealDolls on the customs clearance level; no specific criterion exists except the public morality clause. This study is vital in that it reviews issues of RealDolls customs clearance from legal and ethical perspectives. Doing so also has a practical significance of providing implications for the customs policies regarding items deemed pernicious to public morality.

Keywords RealDolls, Sexbots, Import bans, Customs clearance

1. Introduction

Customs clearance is the backbone of international trade. However, the process faces dire challenges when it comes to clearing RealDoll[1] imports. Customs clearance is a procedure for verifying whether the import, export and return of filed items comply with relevant legal requirements [2]. This implies that the less ambiguity there is in defining goods [3] and finding applicable domestic laws, the more likely the goods will be cleared successfully. In reality, however, customs clearance for RealDolls remains a nebulous field. Neither is there a consensus on what constitutes RealDolls nor has an agreement been reached on how to regulate them.

Without compelling domestic legal grounds, the Korea Customs Service (KCS) has placed a hold on RealDoll imports based on Article 234 of the Customs Act – a legal code prohibiting importing “goods that disturb public morality.” In response to the KCS’s clearance
postponement, legal disputes ensued and were fought out until the Supreme Court’s ruling. The Supreme Court was anticipated to decide against the KCS, reasserting its role as the champion of the rights to sexual self-determination and privacy. As of May 2022, a total of 44 relevant lawsuits have been initiated against the KCS (Han, 2021). Due to its weak legal basis, the KCS has lost all but the pending or dropped cases. This track record of the KCS has sent the message that those who can afford costly legal disputes against the KCS can eventually win its clearance for RealDolls.

Such legal disputes arise because ethical debates and legislation have not been able to keep pace with rapid technological development. The hindrance for successful customs clearance will likely become heftier as products become more complicated and ambiguously defined. For example, sex toys and bio-dolls are nowadays transcending boundaries, armed with virtual reality (VR).

In an effort to weed out such ambiguity revolving around the customs clearance of items deemed pernicious to public morality and present lessons for customs administration, this research aims to explore ways to improve customs clearance for RealDolls. Furthermore, by suggesting specific ideas to improve the process, this research also aims to contribute to the future customs clearance of socially controversial and legally ambiguous items.

Studies on RealDoll in academia have taken place in various fields, from ethics to women’s studies to legal studies and robotics. Among others, we have decided to review studies from ethical and legal perspectives to focus on the legislation and its enforcement issues. Here, it should be noted that there have been a wealth of studies on the ethical and legal basis for regulating RealDolls, but there has been little discussion on how to regulate them on the customs clearance level; no specific criterion exists but the “public morality” clause. The literature review is designed to provide insights on how to incorporate legal and ethical reasoning in the customs clearance process for RealDolls.

This research is conducted chiefly based on a literature review, and supplementary interviews with criminal lawyers and customs officials are also performed to obtain expert knowledge on domestic legislation and customs control against the sex industry. In addition, we also have read mainstream media outlets to learn about public opinion on the topic and analyzed relevant laws and court decisions.

This paper comprises the following parts. In section 2, we will review the kinds of RealDolls and how RealDolls are developed and commercialized globally. Section 3 analyzes the status of the regulations over RealDolls and discusses the limitations of such regulations. Section 4 discusses the approaches to better customs procedures controlling RealDoll imports and draws some implications for customs administrations. Lastly, Section 5 summarizes the research and concludes the discussion.

2. RealDolls: past and present
First and foremost, it is essential to note the difference between RealDolls, sex toys and sexbots. While they are all used to satiate humans sexual desires and tend to be used interchangeably in many studies, they are not the same. Sex toys are based on a particular part of the human body (e.g. dildos and vibrators). On the other hand, RealDolls resemble the entire human body form, enabling sexual intercourse in reality; they are not virtual reality devices. Then, there are sexbots, robots designed to interact sexually with humans. Technological innovation has blurred the boundary between RealDolls and sexbots, as the sexual interaction feature was added to RealDolls (Sterri and Earp, 2021).

While dolls capable of sexual gratification sound like a modern creation, the concept of RealDolls has a long pedigree dating back to the Greek myth of Pygmalion (Kim, 2020). Since the mythical reference to RealDolls, various sorts of RealDolls existed throughout human history, but it was during the 1970s that RealDolls became controversial. The decade saw notable advances in material technology. Materials such as fiber, latex, silicone and rubber
could now be used to imitate the human body more precisely. Progress in the field continued; nowadays, some RealDolls equipped with artificial intelligence (AI) can even interact with humans, reacting to human voices and touch, and moving and moaning automatically.

RealDolls gained widespread popularity when Abyss Creations LLC launched its model RealDoll. At the launch, RealDoll’s price exceeded $5,000, but it could not stop the steam. RealDolls came to be understood as items for sexual pleasure and eventually became synonymous with sex dolls and sexbots (Danaher, 2017b). These days, RealDolls are produced in female, male and transgender forms, but the female form is by far the most popular; it accounts for 90% of RealDoll sales. Various RealDoll models exist, ranging from TrueCompanion’s Roxxxy to Sergi Santos’ Samantha to Realbotix’s Harmony.

As RealDolls percolated into ever more markets, some expressed legitimate concerns over RealDolls (González-González et al., 2021; Kleeman, 2017; Kang, 2020). They argued RealDolls might promote the objectification of women, sexism and rape. For example, “Frigid Farah,” “Wild Wendy,” “Young Yoko” and “Mature Martha” were the modes installed in Roxxxy [4], which could send the wrong message about women and sexual activities. Furthermore, with 3D printing technology readily available, RealDolls’ hair, eyeballs, body shapes and genitalia can all be customized according to the buyer’s request. This may lead to the replication of a specific person’s body without consent (Lancaster, 2021). Table 1 summarizes the RealDoll models manufactured since 2005 and their key features.

Although importing RealDolls is technically prohibited in Korea, they are imported through illegal channels and sold in the country. The producers, origin countries and import quantity are unknown in such cases (Cha, 2021). Through the 2019 National Assembly inspection, the KCS reported that formally filed RealDoll imports amounted to 13 cases in 2017, 101 in 2018, 356 in 2019, 280 in 2020, and 307 until August 2021, which sums to 1,057 cases as shown in Table 2 (Lee, 2019; Han, 2021). In 2019, the Supreme Court ruled against the KCS, ordering it to clear the importation of a RealDoll model. The ruling was limited in scope.

| Launch year | Manufacturer/Producer/ Country | Model | Key features |
|-------------|--------------------------------|-------|--------------|
| 2005        | Michael Harriman/Germany      | Andy  | Respiration, heartbeats and maintenance of body temperature through an internal heater |
| 2010        | TrueCompanion LLC/United States | Roxxxy | Wi-Fi, AI-enabled speech and sound. Five modes, including “Young Yoko” and “Frigid Farah” |
| 2010        | Hiroshi Ishiguro/Japan        | Germinoid F | Resembles a Japanese female in her 20s. While it is not a robot, it is known as “the sexiest robot in the world”, and shows how realistic RealDolls could look |
| 2016        | WM Doll/China                 | -     | Moves the eyes, arms and torso and has speech features. In 2018, among 20,000 RealDoll sold, 20 were equipped with AI |
| 2017        | Synthea Amatus/Spain          | Samantha | Equipped with eight modes, including “Family Mode” and “Sexy Mode.”. Updated through SD slot |
| 2018        | Shenzhen Atall Intelligent Robot Technology/China | Emma, FeiFei, etc. | Temperature adjustable to 37 °C and can move eyes, lips and hair |
| 2018        | RealDoll/Abyss Creation/ United States | Harmony | Most resemblance to human so far. Conversation features, facial expressions, touch sensing, internal heating, basic movements and user preference memory. Has five models. Modes and voice customizable |

Source(s): Danaher (2019), Di Nucci (2017), González-González et al. (2021), Kleeman (2017) and Kang (2020)
because it only applied to the same model brought to trial. Therefore, the remaining 1,056 cases are still waiting for customs clearance. Lawsuits filed against the KCS amount to 42 cases as of August 2021, thirty-eight of which are yet to be ruled by the Court and six of which are explicitly waiting for the Supreme Court’s decision.

Imported RealDolls are sold at around USD 1,000 in the domestic market. Due to their high price, most of them are introduced through specific places where people rent and use them. Though there are no accurate statistics, more than 60 places for RealDoll experience have opened nationwide. Under current laws, prostitution only takes place between people, so places for RealDoll experience are not classified as brothels, which are subject to a crackdown.

3. RealDoll import bans

3.1 Why do RealDolls raise ethical and legal debates?

In her paper, Sujeong Kim (2020) emphasized the similarity between humans and RealDolls. RealDolls imitate human traits, emotions and behaviors to such an extent that when people use them, they are not only immersed in sexual activities but also build connections with them. The intense experience RealDolls offer is incomparable to that of sex toys (McArthur, 2017).

Due to their strikingly stimulating yet uncontrolled sexual experience, RealDolls give rise to ethical, philosophical and legal debates (McArthur, 2017). Since RealDolls are objects, they do not require consent before sexual activities, and thus it is up to the user to decide what to do with them. This may make the user accustomed to unilateral sexual activities without consent and promote sex crimes like rape.

In fact, some RealDolls are produced for rape and pedophilic sexual experience (Gutiu, 2016). There are concerns that people who use such RealDolls may try the same in the real world, leading to suppressive sexual activities without consent and sex crimes. While this may be a valid reason to regulate RealDolls, as of now, there is not enough evidence to back this argument. Furthermore, some argue that it is possible for a person to consume a RealDoll in a way that would be illegal if done to a real person and act differently in the real world, harming nobody. Below, we go over the arguments for and against RealDoll regulations in more depth and explore what scholars suggest should be done about RealDolls.

3.1.1 Arguments for regulating RealDolls. The overarching argument in favor of regulating RealDolls highlights the power imbalance that can be so easily created through the consumption of RealDolls. Examples of RealDolls abound that show how this process takes place (Sparrow, 2017). Some RealDolls yell “No” as a sign of dissent, only to be repressed eventually during sexual activities. This feature is intended to magnify the pleasure from not agreed-upon sexual activities. Not only is consent absent, but rejection is ignored or even quelled. In addition, there are RealDolls with childlike forms made to satisfy pedophiles. Rather than stressing that children need more protection, RealDolls clearly show how adults can abuse children using their lopsided power. There also are RealDolls designed based on a specific person without explicit consent (Lancaster, 2021). RealDolls of the ilk disregard the person’s consent and reduce the person to a mere object without a voice.

From an ethical point of view, the aforementioned power imbalance between sex partners is not what the society should be aspiring for. Such imbalance is both exaggerated and

| Year   | 2016 | 2017 | 2018 | 2019 | 2020 | August 2021 | Total |
|--------|------|------|------|------|------|-------------|-------|
| Import (cases) | 13   | 13   | 101  | 356  | 280  | 307         | 1,057 |

Source(s): 2019 State Audit Report; Lee (2019); Han (2021)
unrealistic; consent is absent, women are objectified and sometimes even treated like sex slaves. Sparrow (2007) advocated for regulating RealDoll production, stating that RealDolls cannot be designed to promote ethical sexual activities and encourage sexual inequality and crimes. As long as RealDolls for rape, sexual activities with children before puberty or specific persons without their consent are consumed, these RealDolls will be criticized for potentially fueling immoral sexual activities (Danaher, 2019).

From a legal point of view, the message RealDolls are sending is worrying. It is especially concerning if they promote such power imbalance to the extent that some RealDoll users are tempted to try what they do with their RealDolls in real life and inflict damage on others. If this is the case, regulations should be put in place to prevent such damage. In this context, Danaher (2017a, b) argues that the criminal law should regulate RealDolls designed for rape and pedophilic sexual experience.

3.1.2 Arguments against regulating RealDolls. When it comes to arguments against RealDoll regulation, it is essential to understand that opportunities to fulfill one’s sexual desires are not shared equally among people (Jecker, 2021; Levy, 2007; Yamaguchi, 2020). The elderly, those who live alone, those with trauma related to sexual experience and those living in a place with a highly lopsided sex ratio, just to list a few, all find it significantly difficult to find sexual partners. RealDolls may be a partial remedy for these marginalized groups, which is why they should be allowed.

RealDolls can not only satisfy the elderly’s sexual needs but also serve as their much-needed companion. Just like people of other age groups, the elderly also have sexual desires. According to Jecker (2021), the sex lives of the elderly have been ignored and perceived as humiliating due to “ageism.” Simultaneously, the elderly are usually left alone, with their children visiting them not frequently enough; they need company. RealDolls can serve as quasi-familial objects to which the elderly build an emotional attachment.

Some may be skeptical of people building close connections to RealDolls, but in Japan, despite the price higher than 6,000 US dollars, some elderly RealDoll users buy them to live, take a stroll and converse, not to engage in sexual activities with them (Yamaguchi, 2020). Moreover, the approximately 2,000 RealDolls sold in Japan are mostly neither armed with artificial intelligence nor are capable of moving. This role of RealDolls should not be downplayed as the demography of most advanced countries is rapidly aging. RealDolls may provide company to those living alone in general as well. Due to the decrease in marriage and families living separately, a significant number of people nowadays lack companion, and RealDolls can fill the gap for them.

The list of RealDolls’ benefits continues. RealDolls satisfy the sexual desires of sexual minorities, for whom it is difficult and sometimes even dangerous to find a sexual partner (Di Nucci, 2017; McArthur, 2017). For those in an environment with a heavily unbalanced sex ratio like China, Indonesia, jails and the military, RealDolls may serve as a way for them to channel their sexual desires. RealDolls may also serve those traumatized due to sexual experiences and those suffering from depression needing a companion. RealDolls empower marginalized groups by providing more opportunities to pursue happiness through sexual activities. In turn, this will help mitigate potential social unrest arising from sexual inequality, such as sex ratio imbalance and difficulty finding a sexual partner. Because of these benefits, Danaher (2017b) maintained that RealDolls should be allowed for these people even though she most supports RealDoll regulation.

Apart from the reasons above, scholars like Sterri and Earp (2021) pointed out that while the consumption of RealDolls may cause some problems, banning them outright may not be the most effective way to reduce the adverse effects caused. Instead, they argued that the trade-offs of regulating or not regulating RealDolls should be carefully weighed.
3.2 Limitations of enforcing RealDoll regulations

3.2.1 Obscenity and its vagueness. In Korea, anti-RealDoll arguments have the upper hand. Regulations on RealDolls are legitimized by Article 234 of the Customs Act, which stipulates the ban on imports that disturb public order or threaten traditions – or degrade “public morality” – as seen in Table 3. While Civil Law, Criminal Law, Tax Law and Administrative Law all regulate some items, citing potential public morality degradation, what debases public morality stands on shaky ground.

The Supreme Court decides whether an import disturbs public morality according to the regulation against obscenity based on the Criminal Law [5], but the concept of obscenity is not lucid enough. The Court writes that an obscene item “is at odds with sexual traditions, so it not only creates an atmosphere of inferiority and promiscuity but also severely damages human dignity and values and distorts them,” and thus some RealDoll imports could be prohibited (Kang, 2020; Kim, 2014). While the Court’s explanation provides some guidance, it is not enough to navigate the uncharted water of RealDoll regulation. As stated earlier, RealDolls have positive and negative sides like anything else.

Furthermore, how people interpret “sexual traditions” and “human dignity and values” changes over time and varies according to the place. Also insufficiently unexplained is the relation between the Criminal Law and Article 234 in banning RealDoll imports. In terms of the technicality of Article 234, it is unclear what “threatening traditions” means precisely. Whether “traditions” should be interpreted as sexual traditions or traditions in general remains an unsolved question without additional legal ground to back either of the interpretations. Due to such ambiguity, the Constitutional Court pointed out that obscenity is a vague concept, unable to meet the requirements for legal certainty [6].

Should obscenity be clearly defined, executing regulations would still have limitations, as regulating the sale, distribution, purchase and use of RealDolls may infringe upon fundamental rights protected by the Constitution. Regulating obscenity restricts “freedom of business,” inferred from Article 15 of the Constitution, which guarantees freedom of vocation, hence the right to import goods that may benefit certain people in a particular industry. Regulating obscenity may, for reasons explored previously, encroach upon the right to the pursuit of happiness – mentioned in Article 10 of the Constitution – and hinder “sexual self-determination” – established by the right to privacy and individual freedom in Article 17 of the Constitution. In particular, because regulations, in the end, intend to raise “public wellbeing,” there must be a compelling reason for government intervention restricting sexual self-determination and individual rights.

3.2.2 Change in the social perception of obscenity. As a result of obscenity and public morality’s hazy definition, regulations on obscene items tend to be executed actively when the

| Relevant article                        | Relevant portion                                                                 | Execution of regulation                     |
|----------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------|
| Article 234 of Customs Act (import and export ban) | Items that . . . disturb public order or threaten traditions | Import and export ban or clearance hold      |
| Chapter 22 of Criminal Act (crimes concerning sexual morals) | Manufacturing, possessing, importing, or exporting obscene documents, paintings, film and the like for their distribution, sale, lending or exhibition in public | One-year imprisonment or shorter or a five million-won fine or less |
| Article 242 (arranging for prostitution) |                                                                                |                                             |
| Article 243 (distribution, etc. of obscene pictures) |                                                                                |                                             |
| Article 244 (manufacture, etc. of obscene pictures) |                                                                                |                                             |

Table 3. Article 234 of the Customs Law and Obscenity Regulations in Criminal Law

Source(s): Article 234 of Customs Act, Article 242, 243, 244 of Criminal Law
general public is interested in doing so (Marchant and Climbingbear, 2022). However, they may come across significant resistance over time as the public’s views and opinions on what is moral and acceptable change. In such a scenario, regulations liberalize, allowing what was previously forbidden. A number of precedents show such relaxing rules.

In the past, in the US, Christian values used to influence society’s view of morality much more than they do now (Marchant and Climbingbear, 2022). Thus came the anti-miscegenation statute of Virginia and the anti-sodomy law of Texas, reining in what was then generally viewed as obscene according to Christian belief. Nevertheless, over time, Christian ethics lost much support and could not serve as enough justification for punishing the mixing of races and sodomy (Eskridge, 2020). As the US Supreme Court made broad interpretations of the Constitution, it viewed the anti-miscegenation statute and the anti-sodomy law violated the Due Process Clauses of the Fourteenth Amendment and ruled them unconstitutional.

Following such liberalization, more emphasis was given to individual rights, and the focus shifted to regulating the commercial sale and promotion of objects that may bear society-wide effects (Marchant and Climbingbear, 2022). This change marked a departure from the past in that instead of specific sexual behaviors at odds with conventional sexual activities, regulations are now centered on the non-private aspects. Furthermore, it was understood that sexual activities could not be a reason for severe punishment, so statutes stipulating such punishment have chiefly become obsolete or been abolished.

Regulations on obscenity in Korea have also witnessed relaxation as views on sexual activities have become more liberalized. A sterling example is the abolition of Criminal Law Article 241, which was used to punish adultery. This article stipulated imprisonment for two years or shorter when sexual activities through adultery could be clearly corroborated. The Constitutional Court ruled Article 241 unconstitutional in 2015 since it infringed upon sexual self-determination as well as individual privacy and liberty and eventually was scrapped from the Criminal Law in 2016.

3.2.3 Lukewarm support and loopholes of guidance. Despite their outdated nature, people are still against abolishing all regulations on obscenity (Posner, 1992). They believe the very existence of such regulations denounces, negatively frames and stigmatizes socially unacceptable behaviors and those who participate in them. Therefore, some regulations on obscenity remain effective due to the public demand, but people are mostly lukewarm about regulating obscenity. This, in turn, leaves the government without the motivation to devise more effective ways to enforce the regulations. The Anti-Obscenity Enforcement Act of 1998 of Alabama, prohibiting the sale of sex toys, is an example (Marchant and Climbingbear, 2022). While it is still effective, actual enforcement by the Alabama police is hard to come by.

Korea also faces a similar situation. The Regulation of Amusement Business Affecting Public Morals Act forbids the sale of sex toys, but it is unclear whether it is strictly and consistently enforced. As with RealDolls, any category of sex toys can be regulated only after a court decision in a lawsuit takes place. This means each potential shop selling sex toys needs to be inspected individually to enforce this act. As the industrial sector of adult shops selling sex toys is not clearly categorized, even surveying the shops poses a challenge (Kim, 2018; Park, 2013). Social consensus for regulating the sale and promotion of such adult shops is tenuous, so it does not incentivize the government to devise specific enforcement mechanisms.

The current system in which Customs operates does not help the enforcement of RealDoll regulations either. Customs procedures for imports take place as items are declared for importation. This mechanism generates practical difficulties in regulating RealDolls because Customs’ bans on imports are predicated on international or domestic law, but no law specifically defines or regulates RealDolls. In other words, sex toys or RealDolls are not yet...
classified for customs clearance, leaving their clearance at the mercy of customs officers in charge.

Due to such loopholes of the existing regulations, or lack of guidance, RealDolls are often classified wrongly as mannequins for apparel by Customs (Choi, 2021). This implies that if the import declaration does not mention RealDolls, there is no way to check whether the import contains RealDolls. If RealDolls are found during a customs inspection, it is still difficult to verify whether they were approved by a court, so even the clearance of those models with approval ends up being delayed.

The KCS, on its part, tried to resolve this problem, but failed to provide detailed and realistic guidance. The 2012 KCS internal instruction [12] states that customs officials should place a hold on the clearance of all sorts of sex toys except for items cleared and approved as not pernicious to public morality in court decisions, the Korean Tax Tribunal, the Customs Examination Committee or organizations of the sort. To benefit from this exception, the RealDoll should be identical to the previously cleared RealDoll in terms of its model, industrial standards, foreign suppliers or manufacturer. Practically, meeting these requirements was a pipe dream for many RealDolls.

In 2014, the manual was revised as RealDoll import regulations faced resistance [13]. The revision entrusted Incheon International Airport and the Pyeongtaek Customs Office with sex toy and RealDoll clearance [14]. The Customs Clearance Screening Committee was established, charged with the oversight of RealDolls in addition to the sex toy and RealDoll models previously cleared through court decisions. The changed manual also developed a database for approved sex toys to prevent the repeated customs clearance delays for approved models.

However, as the KCS was deluged with lawsuits, and upon losing multiple cases, the KCS lost general trust, especially in terms of its administrative capabilities. In cases ensuing the KCS’s deferral of RealDoll customs clearance in 2019 and 2021, the Supreme Court ruled in favor of the plaintiffs. The reverberating message from these cases was that the KCS’s clearance was attainable through lawsuits. Unsurprisingly, 42 related lawsuits were filed as of August 2021. Thirty-eight are waiting for court decisions, and six are waiting for the Supreme Court’s judgment (Han, 2021).

3.2.4 Bottom line: limited regulations. As examined above, a total ban on RealDolls not only forgoes their potential benefits, but its enforcement also requires an exorbitant cost. More importantly, previous attempts to impose a total ban have mostly failed (Humphreys, 2017). However, this is not to say there should be no regulations on RealDolls. Just like any other products and technologies, RealDolls may affect the environment, the protection of personal information and many more aspects of human lives. Those effects should be thought through, and some regulations should be in place to fend off adverse effects, though limited in their breadth and width (Danaher, 2017a).

Researchers overall point out three ways to tackle potential problems due to RealDolls. One is to regulate RealDolls in the form of a child. Another is to set a minimum age for the purchase of RealDoll. Last but not least is to ban the manufacturing and sale of RealDoll based on a specific person without consent. Nevertheless, debates have been mainly limited to childlike RealDolls, and regulating them has not been as successful as one might have wished.

In most cases, other than banning childlike RealDoll imports, no law prohibits the sale, manufacturing, possession or use of childlike RealDolls yet. In the case of Korea, the Supreme Court in 2021 ruled in favor of the KCS regarding its decision to defer customs clearance of childlike RealDolls, arguing they would “bear a negative impact on public morality” [15]. However, legislative efforts have not born fruits. The “Revised Children and Adolescents Sexual Protection Act,” proposed to the floor too in 2021, forbids the manufacturing, import, sale and lending of childlike RealDolls, and is still pending in the National Assembly [16].
The United Kingdom only bans importing childlike RealDolls like Korea. The 1979 UK Customs and Excise Management Act prohibits the importation of “indecent or obscene articles.” Legal precedents made “anatomically detailed” childlike RealDolls covered by the law (Chatterjee, 2020). As for the United States, Customs Office has the power to seize “obscene or immoral” items, so can ban the import of RealDolls in the underage form. Still, there is no way to prevent the purchase, possession and use of such RealDoll within the United States (Marchant and Climbingbear, 2022). In 2018, the US House of Representatives passed the Curbing Realistic Exploitative Electronics Pedophilic Robots (CREEPER) Act in an attempt to ban childlike RealDolls totally, but in 2018, the act died in the Senate after passing the House. In the following year, a House committee introduced the Jurists United to Stop Trafficking Imitation Child Exploitation Act of 2019 (“JUSTICE Act”) – which included a number of similar rules to those of the CREEPER Act – but the bill passed neither of the Houses.

Two reasons can be pointed out for the failure of legislating regulations on childlike RealDoll. Firstly, it is difficult to come up with a clear definition for “Childlike.” In Korea, it is ambiguously defined as an item “patently perceived as a child or an adolescent,” and in the United States, as an item “with the features of, or with features that resemble those of, a minor.” Especially since there is a fine line between the physical traits of minors and adults in some cases, even if childlike RealDolls are banned, deciding which ones to ban will be a problem. Secondly, even if the definition of “Childlike” were accepted, the claim that sexual activities with dolls in the childlike form may lead to sex crimes against children would still lack evidence. Currently, an extremely limited number of people are using RealDolls, so it is difficult to examine how they actually use RealDolls. Furthermore, it is unsubstantiated whether those who use RealDolls are more likely to commit child sex crimes than those who do not (Chatterjee, 2020).

4. Discussion
4.1 RealDoll regulation enforcement
As seen above, RealDoll regulations should be practical and limited in scope with clear benefits. Thus, laws should be more nuanced. For example, the sphere of influence of the Customs Law Article 234 – interpreted as a total ban on RealDolls – should be reduced. Even then, it is still a tall order to forge unambiguous and legitimate criteria to regulate “items pernicious to public morality.” A point of divergence in the legal debates on RealDolls is whether RealDolls need to be regulated when there may be no victim involved in the manufacturing, distribution and sale of RealDolls. While it is better safe than sorry, a ban on the manufacturing, distribution and sale of RealDolls would be too heavy a shackle of individual freedom.

Hence, punishments related to RealDolls should apply only when there is an actual victim involved in the manufacturing, distribution and sale processes. To discourage such misuse of RealDolls, additional punishment should apply to those guilty involved in the processes (Chatterjee, 2020; Ost, 2010). For the sake of “public morality,” when it comes to childlike RealDolls or RealDolls based on a specific person without consent, their distribution and the online/offline publication of their images should be punishable (Chatterjee, 2020; Marchant and Climbingbear, 2022). However, skeptical views prevail in the case of punishing the manufacturing of RealDolls based on a virtual human being; there is no victim, and it goes against the freedom of expression. So do views on whether simply possessing RealDolls based on a virtual human being is punishable (Chatterjee, 2020; Marchant and Climbingbear, 2022; Ost, 2010).

In addition, as laws often lag behind technological advances, the laws regulating RealDolls should also include words that especially consider evolving technology.
The CREEPER Act 2017 of the United States includes “anatomically-correct doll, mannequin, or robot, with the features of, or with features that resemble those of, a minor, intended for use in sexual acts.” On the other hand, the “Revised Children and Adolescents Sexual Protection Act” of Korea defines childlike RealDoll as toys or dolls that can be clearly perceived as children or adolescents and can be used for sexual intercourse or similar activities to sexual intercourse. Thus, Korean law excludes robots and more sophisticated products. Considering the speed at which technology and new products are being developed, the definition should be expanded to include VR devices and bio-doll [17] and more. Specifically, Chatterjee (2020) suggests the inclusion of “any object intended to simulate a child, howsoever produced” in the wording.

Setting the age range for childlike RealDoll is another principal issue, and the current definition applies to those younger than 19 to also include pedophiles, hebephiles [18], and ephebophiles [19] [20]. Nonetheless, as Marchant and Climbingbear (2022) pointed out, the older the upper end of the age range is, the less clear the distinction between adult and underage bodies is. Hence, it is suggested that the coverage of regulations on RealDoll in the form of a child be based on “reasonable doubt” (Al-Alosi, 2018) or “predominant impression of a child” [21]. This definition may also be applied to regulations on RealDoll based on the looks of a specific person without outright consent.

4.2 Lessons for customs clearance procedures
The ideas mentioned above for RealDoll regulations also shed light on how to interpret Customs Act and improve customs clearance procedures concerning RealDolls. Currently, as per principle, RealDoll clearance is postponed and takes place under a positive list system, which grants clearance solely to models approved through a court decision or the Customs Clearance Screening Committee. As discussed earlier, this system, in practice, imposes a total ban, so it encroaches upon constitutional rights such as sexual self-determination and other individual liberties; this ban is difficult to legitimize and is not cost-effective.

Therefore, a negative list system seems to be a better alternative. In a negative list system, the law’s benefits are clear, and the focus is on the appropriate customs clearance monitoring system suggested for RealDoll based on research. Especially, a negative list system should include regulations on items such as an import ban on RealDoll that simulate a child or the looks of a specific person without express consent. In addition, the system should also include restrictive measures on importers that distributed or published online/offline childlike or nonconsensual RealDolls.

With little doubt, such a change may face immense resistance, so the Customs Clearance Screening Committee should be reinforced with the necessary resources and be able to keep track of domestic legislative processes. In particular, the Customs Clearance Screening Committee should be capable of providing a foundation for changes in the KCS’s customs clearance policies regarding RealDolls. Also, KCS should be in charge of the committee instead of the customs offices at the port of entry. Moreover, there is a need to expand the committee’s role, which is currently focused on items, so that it examines the research results of RealDoll imports and their domestic distribution and assesses the establishment and application of customs clearance guidelines that reflect the research results.

In addition, for the importer restrictions due to the publication and distribution of prohibited RealDolls, a system should be created whereby the Ministry of Gender Equality and Family, which is in charge of implementing the “Child and Adolescent Sexual Protection Act,” and the Korean National Police Agency and the Ministry of the Interior and Safety, which are in charge of the “Entertainment Businesses Act,” can collaborate. For its part, the KCS database on RealDolls approved for imports should be updated to include items that have not yet received clearance and importers that distributed or published such items online/offline.
5. Conclusion
The Supreme Court’s decisions in favor of RealDoll imports have brought to the fore the changing values regarding sexual traditions and the need for changes in the KCS policies. Furthermore, as social distancing has been put in place for an extended period of time, the distribution of RealDolls on online and offline stores has gained traction. In turn, the KCS regulations have lost their legitimacy even more.

This research delved into the arguments for and against RealDoll regulations and explored the limitations of current legislation and enforcement, intending to find ways to overcome those limitations. During the process, lessons helpful for improving customs administration could also be found. RealDoll doubtless objectifies women, creates a submissive image of women and thus may promote rape and pedophiliac sexual activities. At the same time, however, as the population ages, it has become difficult to ignore that an increasing number of people are being denied sexual satisfaction; it is difficult to argue for a total ban on RealDoll. This calls for limited regulations, which target RealDoll that simulate a child or the appearance of a specific person without explicit consent and the distribution or online/offline publication of such RealDolls. To combine this with the customs clearance procedures, the KCS should oversee the Customs Clearance Screening Committee and, in addition to devising a more precise customs classification for RealDolls, expand its role to examining their importers and related research and improving customs clearance guidelines. The current KCS database that includes RealDolls that have been cleared should also be changed to include the list of RealDolls, whose clearance has been denied.

While aiming to explore ways to improve RealDoll regulations, this research was not without limitations. It did not discuss issues relevant to the individual types of RealDolls and ways to regulate their distribution and publication. Such a discussion requires more ethical, legal and administrative research, and we decided to leave it for future research.

Notes
1. Real dolls are called variously, such as RealDolls, sex dolls and sexbots, but in this paper, they are collectively referred to as RealDolls.
2. Customs Act Article 2. Definition.
3. As for the Customs Classification, Korea Customs Service uses a ten-digit classification system, called HSK, which is designed based on subdivisions under the six-digit Harmonized System under the International Convention on the Harmonized Commodity Description and Coding System and Amending Protocol.
4. It was released in two basic models, RoxxxySilver and RoxxxxyGold, and in 2017, the Silver model sold for $2,995, and the Gold model sold for $9,995.
5. Refer to the Supreme Court’s June 23, 2009 ruling 2008 Doo23689, and the Supreme Court’s June 13, 2019 ruling 2019 Doo35503.
6. Refer to the Constitutional Court’s decision on August 29, 2013, a decision of en banc, 2011Heonba176; the decision of the Constitutional Court’s decision on April 30, 1998, a decision of en banc, 95Heonga16.
7. The anti-miscegenation statute of Virginia was repealed by the Supreme Court ruling of Loving v. Virginia in 1967.
8. The Texas statute, which stipulates same-sex sex as a criminal offense, was repealed in 2003 by the Lawrence v. Texas Supreme Court ruling.
9. Refer to the Constitutional Court’s decision on February 26, 2015, a decision of en banc 2009Heonba17.
10. For example, Alabama’s Anti-Obscenity Enforcement Act of 1998, which prohibits the sale of “any device designated or marked as useful for the human genital organs” remains in effect.
11. Article 2 of the Act of The Regulation Of Amusement Business Affecting Public Morals limits the scope of enforcement to games, a video-viewing establishment and Karaoke machine business. Under Article 3 of the Act, circulating, selling, lending, allowing others to watch or view them and displaying or storing them for the purpose of circulating, selling, watching or viewing of such products are prohibited.

12. Customs Clearance Instructions for Adult Supplies (Tongkwankihoikkwa-1684, April 4, 2012)

13. Customs Clearance Instructions for Adult Supplies (Tongkwankihoikkwa-3557, June 19, 2014)

14. The Incheon International Airport Customs Office includes the Incheon Airport International Post Customs Office and the Gimpo Customs Office.

15. Refer to the Supreme Court decision on November 25, 2021, 2021Doo46421.

16. Refer to the bill proposal 2107275 for “a Partial Amendment to the Children and Adolescents Sexual Protection Act” on January 8, 2021, by twenty lawmakers including Rep. Choi Hye-young at the 383rd National Assembly (temporary meeting).

17. It refers to a RealDoll made using live cell printing technology or tissue engineering.

18. An adolescent girl pedophile.

19. An adolescent boy pedophile.

20. In the Child and Adolescent Sexual Protection Act, it refers to a person under the age of 19.

21. Definition in The Coroners and Justice Act 2009 of the UK, which punishes the possession of non-photographic pornographic images by minors under the age of 18.

References
Al-Alosi, H. (2018), *The Criminalization of Fantasy Material*, Routledge, London.

Cha, C. (2021), “RealDoll manufacturers rather welcoming the regulation... child forms should be banned”, *Mail Business Newspaper*, available at: https://www.mk.co.kr/news/society/view/2021/02/166721/ (accessed 3 March 2022).

Chatterjee, B.B. (2020), “Child sex dolls and robots: challenging the boundaries of the child protection framework”, *International Review of Law, Computers and Technology*, Vol. 34 No. 1, pp. 22-43.

Choi, Seo-young (2021), “Clever smuggling of 10 million won RealDolls, by separate customs clearance as parts”, *NewsOne*, available at: https://www.news1.kr/articles/?4496095 (accessed 3 March 2022).

Danaher, J. (2017a), “Robotic rape and robotic child sexual abuse: should they be criminalized?”, *Criminal Law and Philosophy*, Vol. 11 No. 1, pp. 71-95.

Danaher, J. (2017b), “Should we Be thinking about robot sex?”, in Danaher, J. and Mcarthur, N. (Eds), *Robot Sex: Social and Ethical Implications*, The MIT Press, Cambridge, MA, pp. 3-14.

Danaher, J. (2019), “Building better sex robots: lessons from feminist pornography”, in Zhou, Y. and Fischer, M. (Eds), *AI Love You- Developments on Human-Robot Intimate Relations*, Springer, pp. 133-147.

Di Nucci, E. (2017), “Sexual rights, disability and sex robots”, in Danaher, J. and McArthur, N. (Eds), *Sex Robots*, MIT Press, Cambridge, MA, pp. 73-88.

Eskridge, W.N. (2020), “Review: a social constructionist critique of Posner’s sex and reason: steps toward a Gaylegal Agenda”, *The Yale Law Journal*, Vol. 102 No. 1, pp. 333-386.

González-González, C.S., Gil-Iranzo, R.M. and Paderewski-Rodriguez, P. (2021), “Human–robot interaction and sexbots: a systematic literature review”, *Sensors*, Vol. 21 No. 216, pp. 1-18.

Gutiu, S.M. (2016), “The roboticization of consent”, in Calo, R., Froomkin, A.M. and Kerr, I. (Eds), *Robot Law*, Edward Elgar Publishin, MA, pp. 186-212.
Han, H.J. (2021), “The war with the RealDolls. The KCS withholding customs clearance of 1,057 cases - 38 cases of countersuits”, Sejong Ilbo, available at: https://www.sejungilbo.com/news/articleView.html?idxno=34346 (accessed 3 March 2022).

Humphreys, J. (2017), “Philosophers on the ‘intriguing ethics’ of sex robots - sexbots are under development. Do not ban them, an academic team advises”, The Irish Times, available at: https://www.irishtimes.com/culture/philosophers-on-the-intriguing-ethics-of-sexrobots-1.3294534 (accessed 3 March 2022).

Jecker, N.S. (2021), “Nothing to be ashamed of: sex robots for older adults with disabilities”, Journal of Medical Ethics, Vol. 47 No. 1, pp. 26-32.

Kang, M.Y. (2020), “Real doll and necessity of criminal regulation”, Chung-Ang Journal of Legal Studies, Vol. 44 No. 2, pp. 103-136.

Kim, Y.S. (2014), “A study on the withholding customs clearance of sexual-device from the sexual self-determination right”, The Journal of Law, Vol. 22 No. 3, pp. 49-70.

Kim, J.W. (2018), “Stuck online. Why didn’t Coupang do a ‘mosaic’ of adult products?”, Seoul Sinmun, available at: https://www.seoul.co.kr/news/newsView.php?id=20181201500040 (accessed 3 March 2022).

Kim, S.J. (2020), “Stuck online. Why didn’t Coupang do a ‘mosaic’ of adult products?”, Seoul Sinmun, available at: https://www.seoul.co.kr/news/newsView.php?id=20181201500040 (accessed 3 March 2022).

Kleeman, J. (2017), “Should we ban sex robots while we have the chance?”, Guardian, available at: https://www.theguardian.com/commentisfree/2017/sep/25/ban-sex-robots-dolls-market.

Lancaster, K. (2021), “Nonconsensual personified sexbots: an intrinsic wrong”, Ethics and Information Technology, Vol. 23 No. 4, pp. 589-600.

Lee, H.N. (2019), “Import of Faceless RealDoll at Ten million won, KCS maintains RealDoll import ban”, Women’s Daily, available at: https://www.womennews.co.kr/news/articleView.html?idxno=193668 (accessed 3 March 2022).

Levy, D. (2007), Love and Sex with Robots: The Evolution of Human-Robot Relations, Harper Collins, New York.

Marchant, G.E. and Climbingbear, K. (2022), “Legal resistance to sex robots”, Journal of Future Robot Life, Vol. 3 No. 1, pp. 91-107.

McArthur, N. (2017), “The case for sexbots”, in Danaher, J. and McArthur, N. (Eds), Robot Sex, The MIT Press, MA, pp. 31-46.

Ost, S. (2010), “Criminalizing fabricated images of child pornography: a matter of harm or morality?”, Legal Studies, Vol. 30 No. 2, pp. 230-256.

Park, M.Y. (2013), Sailing Adult Goods in a Residential Area, KBS News, available at: https://news.kbs.co.kr/news/view.do?ncd=2649104 (accessed 3 March 2022).

Posner, R.A. (1992), Sex and Reason, Harvard University Press, Cambridge, MA.

Sparrow, R. (2007), “Killer robots”, Journal of Applied Philosophy, Vol. 24 No. 1, pp. 62-77.

Sparrow, R. (2017), “Robots, rape, and representation”, International Journal of Social Robotics, Vol. 9 No. 4, pp. 465-477.

Sterri, A.B. and Earp, B.D. (2021), “The ethics of sex robots”, in Vélez, C. (Ed.), The Oxford Handbook of Digital Ethics, Oxford University Press, pp. 1-22.

Yamaguchi, H. (2020), “Intimate relationship with ‘virtual humans’ and the ‘socialification’ of familyship”, Journal of Behavioral Robotics, Vol. 11, pp. 357-369, doi: 10.1515/pjbr-2020-0023.

Corresponding author
Jisoo Yi can be contacted at: jisoo.yi@dankook.ac.kr