

COMPUTER ETHICS

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Topic: WALLED GARDENS

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I declare that I have explicitly stated the parts that I have taken from other resources by citing relevant references, and that all parts other than the citations are my own work.

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INTRODUCTION

By definition, the term “walled garden” stands for a ecosystem of information or technology, which is bounded by the supplier in order to promote commercial interests, ensure system security or hide information [1]. Bounding can be explained as blocking or making it difficult to obtain context from outside of the environment which consists preselected services [2].

Despite the fact that the invention of the term “walled garden” dates back to 1990's, which is proposed by John Malone [3], the initial instance of the term “walled garden” can be considered as AT&T's network policy in the 1960's, since the AT&T rejected integration of other vendors devices to their network due to economical concerns [4]. But, in 1968 Federal Communications Commission (FCC) ruled that Carterfone device which links a two-way radio system to AT&T's network should be allowed [5]. Moreover, according to Viard, walled gardens are being reestablished in China by some of their major E-Commerce companies such as Alibaba and Tencent [4].

Certain internet service providers such as America Online (AOL) and some schools can also exemplify the term walled garden because of mechanisms they use to restrain access of children to context like pornography [6]. Besides, a more recent example is that photo sharing platform Instagram which is possessed by Facebook, is started to prevent sharing links of some of their competitor social applications such as Snapchat and Telegram [7].

OPEN INTERNET

Ever since the invention of the world wide web, it has been a cardinal initiator and incubator of many scientific, technological innovations and advancements. It can be definitely denoted that the open structure of the internet is the main reason behind these properties of internet.

Also, the Internet Society denotes that the internet is a strong instrument to protect essential civil rights because of its structure, and the open structure of the internet must be preserved to achieve sustainability of these properties [8].

World Wide Web Consortium, which is founded by the inventor of the web Tim Berners-Lee, designates standards about the web, such as web design, architecture, devices, services and technologies about world wide web in the definition of “Open Web Platform” [9]. Also, the duty of the World Wide Web Consortium is to channelize the direction of the world wide web technologies in parallel to “Open Standards Principles” [10]. These elemental principles can be outlined as below [11]:

- “Due Process”
The first principle can be explained as guidance of standards should not be influenced by anyone and procedures should be clearly expressed.
- “Broad Consensus”
Procedures should involve different points of views from contributors in order to achieve concurrence about these standards.
- “Transparency”
Society should be informed about projected standards and also advancements about standards and reach of these standards.
- “Balance”
Standards should not be prejudiced in favor of or against of specific parties such as users or firms.
- “Openness”
Access to procedures of standards should be allowed to anyone without any discrimination.

In the view of such these elemental principles, one can assure that service providers, governments and internet corporations like social networks as major responsables about new changes or new directions in the internet technologies, should follow these principles in order to protect open structure of the world wide web.

Federal Communications Commission, is an autonomous organization which governs international and interstate communications in the medium of radio, television, satellite, cable, wire standards in the United States [12]. According to the Federal Communications Commission, Open Internet, which is also referred as “Net Neutrality”, intends that users of the internet should make use of the internet without constraints or directions of service providers [13].

In 2015, Federal Communications Commission released an order about Open Internet, with the full title of “Open Internet Report and Order on Remand, Declaratory Ruling, and Order”. The order denotes rules in order to defence of customer rights and open structure of the internet. In Section C of the order, article 105 through article 109 states these basic rules as following [14]:

- “No-Blocking”

No blocking rule states that service provides has no right to prevent admission of legal instruments to their network.

- “No-Throttling”

This rule prohibits usage of discriminatingly harmful methods against service quality to particular users or instruments.

- “No Paid Prioritization”

No paid prioritization dictates that service providers should not give special privileges about services to specific users or instruments.

Federal Communication Commission had many user friendly applications in the past, such as the Carterfone decision which is explained in the introduction section. Despite the fact that support of Federal Communication Commission's efforts, there are no any current rule or regulation about social networks, therefore there are many problems and many effects of these problems still exist about walled gardens considering open structure of internet.

It can be stated that in nowadays, especially social networks are possessing a serious threat to open structure of the internet, because of their capabilities to adjust the pattern of internet is immense. Their capabilities of such adjustments are primarily based on their huge and user statistics. In accordance with company information about Facebook, they claim that on the average 1.04 billion internet users visit the site daily, which corresponds as a substantial number of users considering the whole world population [15].

Several examples can be specified in order to prove this claim, such as Facebook forces application permissions for some shared content and it also impels filtered contents to users, or Google+ has also same measurements like Facebook [16]. One can undeniably perceive that Facebook has a great number of controversial applications in terms of openness of internet.

As for effects on open internet structure, Paterson asserts that conventional organization of internet infrastructure is being altered because of financial motivations of large companies such as Google, Facebook, Netflix [17]. More than that, Paterson also denotes another effect to openness of internet is caused by confluence of video broadcasters and internet service providers ever since the development of IPTV technology [17].

According to Holmes, origin of the problem about social networks is their commercial needs due to the ads based revenue models they have, and outcome of this problem onto open internet are interdicted API's and information exchange [18]. Without any doubt, transparency and openness of API's are one of the essential ingredient for advancements in the industry.

One another significant effect of these kind of constraints by social networks obviously damaging competition among the market by monopolizing these major companies. Furthermore, Holmes also states another possible effect of walled gardens, but onto this major companies. He notes that this walled garden approach may backfire against social networks because usage counts does not thrive in immoderately quarantined, strained or controlled environments, as in the AOL example [18].

Furthermore, one can clearly deduce that another critical threat to open organization of internet is also caused walled gardens created by efforts of governments in account of the fact that their political tendencies. For example, in Turkey, government occasionally interferes the internet law with the regulation number 5651, due to specific political interest. These interferences clearly disrupts the open structure of the internet. These disruptions not only undermine essential civil rights such as the freedom of obtainment of information or freedom of speech, but also inhibit improvements in the intellectual domain such as new ideas or new technologies.

FREEDOM OF SPEECH

Freedom of speech can be considered as privilege to expression of self notwithstanding any external intervention, except for only legal legislations [19]. However, according to van Mill, freedom of speech is naturally limited by either legitimate justifications consistent with “Harm Principle” which is explained by John Stuart Mill, or in the cause of promote other rights in the society [20]. Mill explains the harm principle as limitations of actions, which should be the only limitation type, when these actions becoming harmful to other people. He also defines harm as in both terms of physical and moral [21].

Freedom of speech is an important concept since it constructs the vital base of transfer of knowledge, information, ideas and concepts. Besides, sustainability of ideas and creation of new ideas or knowledge is achieved by that base which is provided by freedom of speech. Alongside, the internet gives serious chances for freedom of speech which results as expression, share, discovery or creation of existing or new ideas.

Furthermore, it is well known that freedom of speech is an indispensable concept for individual rights and individual freedom, and it is also guaranteed by constitutions of many modern egalitarian societies. For example, article 26 of Turkish constitution states that everyone has the right to publish their ideas or opinions using any medium such as speech or script, without the consent of formal authorities [22].

However, in defiance of constitutional rights given by law, it can be obviously seen that freedom of speech is in danger in the internet medium as well as any other medium, by virtue of the fact that activities of censorship. It is also clear that the source of censorship is based on both commercial and political concerns.

Existence of walled gardens on the internet makes availability of censorship easier, since structure of walled gardens only provide limited resources in terms of information, and also due to available control and measurement mechanisms in the walled gardens. Most important effect of walled gardens is they are causing tunnel vision among users about evaluation of ideas or information, with the consequence of damaging freedom of speech.

Again, similar in the open structure of the internet case, social networks play a significant role also about debilitation of a consequential civil right, freedom of speech, despite all the means they possess about information creating and sharing.

An example case in the 2010 shows that the walled garden environment of the popular social network Facebook which became a vital communication tool of web, was censoring advertisements about campaign corresponding legalization of marijuana, which is a direct violation of right to freedom of speech about an influential contemporary political discussion in the United States [23]. Additionally, about the case, Grim denotes “For a typical college student, if it didn’t happen on Facebook, it didn’t happen”, which explains the power of Facebook as a social medium in about these kinds of issues [24]. However, in 2012, with the help of Electronic Frontier Foundation and American Civil Liberties Union about the topic, Facebook had lift the ban, since their arguments about the ban was not valid in this case, which is prohibiting promotion of tobacco products [25].

Another case about danger of freedom of speech is about “Internet.org” which is a project of Facebook in order to supply internet to some parts of the world such as India, as a vital resource, denoted as “Free Basics” [26]. Despite that the idea sounds charmingly beneficial for users, the real situation results as again a walled garden. It is also a threat to the open structure of the internet, because it will only create a biased and indistinct platform.

Gillula states that in contrast to the supplementary precautions about security such as additional HTTPS encryption Facebook provides with the Free Basics service, the service is considered as a walled garden after all. He denotes that tracking activities of Facebook still endures, since they have the ability to oversee all the traffic overpassing their system [27]. Clearly, it can be deduced that as long as such surveillance operations persist, freedom of speech will be in danger.

Yeung explains that India is against that so called “Free Basic”, the service they provide will be restricted since it allows users to surf only predetermined sites which are only approved by Facebook, and also Facebook will possess the ability of tracking user activities. He furthermore states that Google is also trying to implement the same approach, in fact Google has already installed some of their facilities using drone, ballone, microsatellite technologies around some places in the world, such as New Zealand, Brazil, Australia, but both government officials and telecommunication sector service providers in India stood up against the project due to reasonable concerns about security and also financial concerns since the outcome of the project would bring a cheap source of internet, which would be harmful to their cellphone and data providing business [28].

Hruska states that the giant social network Facebook is becoming more and more like the America Online (AOL), because of the filter mechanism in users stream field that the Facebook imposes. The imposed system is rooted on elevation of some posts and denunciation of some other posts. He furthermore denotes that the primary purpose of such this system is capitalization of contemporary tendencies among users [29]. It can be concluded that this filtration mechanism of Facebook may also prevent freedom of speech.

As another recent example shows that, according to Malcolm, internet in Malaysia is suffering from deficiency of free expression of ideas, due to restrictions of a walled garden environment enforced to local internet service providers, which is supported by government mainly against news sites and blogs about political issues such as a corruption crisis revelant with the prime minister of the government [30].

York asserts that Malaysia is not the only country suffering from this problem, other southern asian countries such as Brunei, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste, and Vietnamare also facing similar situations. York also denotes that total population of these countries sum up over 600 million residents, with over than 160 million internet users which is increasing due to establissements of new communicational infrastructures [31].

In Turkey, vital social communication and information platforms which are frequently used by citizens are also suscepated frequently by government because of political reasons, just as in the example of other countries in the other parts of the world. A recent and important example could be protests against the government. Walled gardens which are created by social networks are also performing in Turkey as well as other countries. Also, another models of walled gardens exist in certain news portals which are created and supported by specific factional centers, although not just the government. In addition to these, current effective internet law with the number 5651 also provides more opportunity to authorities about ensuring and constructing new or existing walled gardens, since it brings regulations undeviatingly against freedom of speech, despite the article 26 of the constitution.

Altuparmak and Akdeniz state that limitations opponent to the freedom of speech which are originated because of recent adjustments about the internet law, are not only constructed as merely administration measurements to certain websites [32]. Another aspect of that walled garden can be considered as profiling of citizens using mechanisms of social media [32].

INTELLECTUAL PROPERTY

By definition, intellectual property can be described as an abstract output of a creative process of thought, which is guarded by the legal system. The legal system prevents unlawful utilization of intellectual properties, with mainly four types of legislations: patents, copyrights, trademarks and trade secrets [33].

First of all, patents provide inventors to possess unique exclusive privileges of producing, commercializing, merchandising intellectual properties as a contract of limited duration, with the purpose to promote researches and fundings of advancements about new and functional ideas, products [34].

Copyright protection laws ensure that only the owner of that copyrighted specific artifact can have claims to duplicate and deliver that artifact, also only the owner can reproduce similar works based upon that artifact [35]. However, laws additionally dictate that these types of claims are restricted by the fair use policy [35]. Fair use policy states that utilization of copyrighted artifacts are not attributed merely to the owner of the copyright, in order to achievements about certain objectives such as criticism, interpretation, journalism, education, analyze or even burlesque [36]. One can easily notice that fair use policy is a critical regulation in the copyright law, since it favors derivation of new ideas or products which is a vital requirement for knowledge-based societies. According to laws, there are mainly four elements about consideration of fair usage discussions: objective of usage, features of original work, quanta imported from the original work and influence of the derived work [37].

Trademarks can be explained as any work in order to distinguish a brand, for example any slogan, emblem or term created by the producer firm of that brand can be considered as a trademark [38]. In addition to definition, laws may broad range of trademarks in some instances, such as features like shape or color about a physical product can be also considered as a trademark [38].

Trade secrets incorporate any essential knowledge or equipment about production, replication or derivation of a particular product, such as patterns, recipes, blueprints or instructions which are unrecognized before, with the potential of composing commercial worth [39]. Several requirements in order to demand coverage of trade secret laws about a knowledge or equipment are as following: corresponding content should not be openly available to public beforehand, bearer or the content should take required countermeasures to guard that content, bearer of the content should verify unlawful procurement of that content from some other firm or person [39]. Ingredients of a well known and popular soft drink can be regarded as a famous example of trade secrets.

One should note that purviews of such legislations may differ dramatically in various countries. As an example, according to Property Rights Alliance, in the The Intellectual Property Rights Index of 2015, Intellectual Property Score Value (IPRI) of Turkey decremented 0.3 points in contrast to 2014, to 5.3 [40]. The Intellectual Property Score Value consists evaluations of political, physical and intellectual laws, and with that score Turkey results as 9th rank among the Eastern European – Asian region and 58th rank among the all nations in the world [40].

Rights and regulations about intellectual property is a controversial issue. Several critiques include different perspectives such as social, economical, jurisprudential and ethical. Moser claims that patent laws has the capability of damaging the process of innovation [41]. He also asserts that observations through the time consist the basis of that claim [41]. According to founder of Free Software Foundation, Richard Stallman, the term intellectual property which is a sided and misleading concept, should be abandoned altogether [42]. Stallman also announces that intellectual property laws are being used as economical tools by certain countries, and therefore he offers a new entitle to identify these laws, "legislative colonization" [42]. Despite the fact that the term is criticized rigorously from different communities, intellectual property laws are defended by certain centers. According to Global Intellectual Property Center, intellectual property laws are beneficial for both economies and consumers since they help to increase accretion value in the economy and they aid to guarantee best grade products to the market for consumers [43]. Also, International Chamber of Commerce affirm that intellectual property is important for developments in small to large scale businesses, and also consumer rights [44]. Furthermore, Mossinghoff states that intellectual property is crucial for transnational commerce activities, for this reason it is also influential for economy and the market [45].

In recognition of outcomes related walled gardens about intellectual property, it is simple to notice that working principles of intellectual property laws are also similar with walled garden mechanisms exist today. Therefore, walled gardens could be regarded beneficial to intellectual property rights. According to Derclaye and Leistner, a walled garden environment was prepared by intellectual property justifications domain through the 18th and 19th centuries [46].

From the consumer rights perspective, proponents of intellectual properties declare that by virtue of regulations about intellectual property, consumer rights are promoted since intellectual rights encourage competition in the market which results better quality goods. Notwithstanding, it can be also realized that some applications about intellectual property based on the walled garden approach are also interfering with a fundamental concept, fair use. Digital Rights Management (DRM) technology which consists several instruments and precautions against duplication of different types of electronic contents on various mediums, can exemplify as a such application [47].

It is also clear to observe that Digital Rights Management applications are again controversial among consumers and producers, in a similar manner of the concept of intellectual property itself. An instance of fair use violation caused by Digital Rights Management system can be considered as digital locks that certain producers impel in digital contents, since digital locks occasionally circumvent replication of the content even in the utterly legal cases without any copyright violations like making backups for personal usage, loaning from libraries and utilizing for scientific or academic purposes [48].

Some other case example shows that Digital Rights Management technologies can be used as an unauthorized access tool, since Amazon managed to remotely remove a content from Kindle electronic book devices [49], which is also another explicit infringement against to consumer rights. As another case, Sellie declared that Digital Rights Management limitations result three critical outcomes regarding to electronic contents within libraries as following: orientation of consumers through inadequate privacy standards, confinements about fair use, danger of "third-party surveillance" [50]. Sellie additionally emphasizes that walled garden structure of the Digital Rights Management system which is monetizing user statistics, should be prevented in order to preserve moralities [50].

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