## **Changing Designer-Function in Open Source**

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#### Abstract

**Purpose**: Open source, since its arrival in 1990's has been instrumental in challenging the copyright owned by traditional texts and narratives. Dissolving of author-function heralded by post-modern philosophers like Roland Barthes has been materialized by open source technology completely. However, along with textual narratives, similar dissolution can be seen for pictorial representations as well like the designing of a web-site for instance. Open source makes available technologies which along with, the content, the presentation, for instance, of the website in equal dissolution stage. This paper seeks to explore this trend for presentation part and argues how, like author-function, designer-function, is in jeopardy

**Design/Methodology/Approach**: For this purpose, the two open-source tools AddArt and ShiftSpace, the Mozilla Firefox extensions have been used to bring home the impact of these in terms of altering the presentation of various websites.

**Findings**: The tools have been found to be significantly impressive in modifying the way the content is presented on the website without the owner's permission. The modifications effected by these tools are presented at the end of the paper in the form of various snap-shots.

**Research Implications**: The implications of these tools can range from purely webethical to political. The tools are not only found to raise ethical concerns of privacy and ownership of the way information is to be presented by the owners, but politically also present a trespassing avenue through which capitalist ideas of ownership of information through copyright can be effected.

**Originality/Value**: The paper has attempted to bring to the forefront the ethicopolitical concerns associated with naively appearing open-source browser extensions like AddArt and ShiftSpace. The considering of concerns can provide a further criteria for evaluating such extensions apart from purely technical which is a norm at present.

*Keywords*: Designer-Function, AddArt, ShiftSpace, Web Aesthetics, Open Source *Paper Type*: Research

### Section -1: Salvaging the Author-Function

D isruptive technologies like internet led to subversion of power structures on the one hand, and the mechanism of knowledge production and access on the other. Stallman's Free Software movement, in 1980s, opened up a new horizon where knowledge access, generation and distribution became a collective concern. With Open Source (OS) Initiative opening wings in early 1990s, the users marveled and appreciated the easy access of knowledge sources which came to be

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seen as a societal property, instead of one individual or corporation's intellectual one **Vainio and Vaden (2007)**. The benefits of freedom to view source code, modifying and redistributing the derivative works, integrating and experimenting with different products, doing away with huge licensing hassles instilled the collective imagination where collaborative sharing came up as new model of production. It quickly seeped to non-techie sharing when artistic works like texts, sound recordings, songs, movies, paintings, came to be shared, modified and distributed online. Creative Commons (CC) supported the free access and distribution of original and derivative works in these spheres through a range of licenses.

At the same time, however, we see apprehensions growing in non-OS quarters regarding the disappearance of 'author'<sup>1</sup> from the scene as derivative works could be easily made from the original, at low cost, without having to have prior permission and commercially distributed as well. Post-modern philosophy of authorship enunciated by Barthes and Foucault had been major precursors of free software initiatives and such apprehensions resultantly. Prior to the emergence of cyberspace, **Barthes** (1977) persuasively argued about the death of author in narratives as text is continually re-interpreted by readers. Author was reduced to author*function* following **Foucault (1979)** proposal as author draws heavily from the background cultural context for creating anything. These acted as catalyst for doing away with the copyright regime in the debate that ensued between the advocates of free software and proprietary ones. However. the emergence of open source materialized their apprehensions. Since open source is a platform of sharing and distributing intellectual material freely without the proprietary rights associated with their authors as strictly as in copyright regimes the apprehension of death of the original author having proprietary rights on its intellectual property by default, comes out as inevitable. In the case of non-textual, aesthetic works on web like paintings, designing websites, etc. open-source renders the designer of the original work (painting or a webpage) virtually non-existent. In analogy to author-function, it is designer-function that is at loss in web aesthetics.

It is argued in this context that apprehension of disappearance of author from the scene is by and large a myth regarding open source as author is very much at the centre in this model of knowledge production. Though, open source does allow the freedom of accessing and modifying the textbased works, narratives or software programs, it does not do so at the cost of deleting original author from the scene. It is proved from the fact that only those materials are left for free accessing and modifying which

<sup>&</sup>lt;sup>1</sup> Author read here as writer, coder, programmer, as related to the particular kind of work.

already bear the stamp of the author, i.e. which are already protected under copyright as shown by **Liang (2007)**. Even when released under Creative Common's license, the derivative works and the fresh manuscripts put author in the centre and grant a series of protective filters, which can be granted as rights to users regarding use of these products. These filters include granting users various rights ranging from right to free access to copy, to modify, to all of them. This means that if a work has been released with license allowing users only to access the work freely, the modification and distribution done by them would be considered illegal. How far the author is comfortable with user's using the work depends entirely on author himself. A cursory glance at various licenses will show this:

- Creative Commons Attribute License (CCAL) Authors retain ownership of the work, but freedom to access, modify, distribute the works is allowed without prior permission. CC itself has range of freedoms associated with their license from mere accessing to full use of the work by the user. The range include
  - Attribution by (cc by) Full rights to the user including distribution, remix, tweak, using commercially, provided credit is given to the original author
  - Attribution share alike (cc by-nd) Allows redistribution commercial or non-commercial, as long as credit is given to the original author.
  - Attribution non-commercial (cc by nc) Allows access, distribution and building upon the work, but with noncommercial usage. Derivates works made from user's modified works don't carry the non-commercial condition
  - Attribution non-commercial non share alike (cc by nc-sa) All above freedoms with the condition of non-commercial usage. Also, derivates works can't be used commercially as well.
  - Attribution non-commercial no derivates (cc by nc-nd) Strictest of all. Allows redistribution with crediting the author, but no derivatives works or their commercial utilization allowed. Licenses (2010)
- GNU-GPLv3 Freedom to access, modify and redistribute the code, without commercial gains GNU General Public License (2007). This is generally applied to the software codes, programs, etc.
- Free Art License Allows user to access, modify and redistribute creative works of art as long as proper credit is given to the original creator/designer/author. It is in line with Berne Convention for the Protection of Literary and Artistic Works. (See Akinci, 2007 for detailed discussion of these licenses).

Thus, the original author is preserved in the scene by way of giving

appropriate credits, and also the credits of the authors of derivative works are preserved similarly. Author-function is not at loss even if the work is released commercially via open source. Rather, author is now more secured as it is now author who decides what range of freedom he wishes the users to have regarding the appropriation of his work. The broad range of author' rights for creative works provided in Creative Commons license testify to this security.

#### Section – 2: Designer-Function in Cyberspace

The designer-function pertaining to non-textual, especially visual arts is represented by webpage designing, graphics, image-generation and is analogous to author-function for textual content. Contemporary culture is highly visual-symbol centric (Thorlacius, 2007a) and fast replacing the information presented via textual narratives. A simple case of news websites would illustrate where it is almost, "impossible to read history from an internet archive [for instance] without constant intrusions by the latest news and banners... the event is grasped visually and there is nothing to comprehend or interpret in it". Banners, thumbnails, creeping lines with breaking news, photo galleries are dominant elements of visual aesthetics on a news portal. Similar stories can be seen in mass-serving portals like shopping, entertainment, consumer-product sites etc. Web aesthetics pay a crucial attention to these visual symbols while designing such portals and is fast emerging and important aspect of Human-Computer Interaction (Tractinsky, 2005). Rather, in any website, visual aesthetics are considered at par with site's functionality, user-friendliness etc. However, the emergence of rapidly increasing user-control over visually presented content like images, advertisements etc. is replacing the designer with designer-function. This is because not only the content, but form as well of the site is coming under user's hold. Earlier it was the owner of the site who decided *what* and *how* the information was to be displayed. The opening of the code empowered the widely distributed network of users to access, modify and redistribute the what-part or content of the software. How-part relates to the way information is presented on a single webpage in terms of its layout, designing etc. which was earlier by and large in the control of web designer at the back. Modifications to this form were delegated to the designer. A bit of customizing ability would be given to users which mostly related to changing the default colors or background themes as exemplified in email accounts or social networking profiles. Still, what kind of themes or colors a user could possibly use on a site was by and large decided by the designer-cum-owner of the site at the back. Moreover, this customization was facilitated for user's personal accounts only, not the general form of the website. For example, users are not permitted to change how the

A steady form over the years builds an image of the product in the mind of users as compared to the ones changing their look every two months. A blue broad horizontal strip with a wide patch of world map dotted with orange busts on the left instantly connects the users to Facebook. Since the form is designed by the site-owner-cum-site-designer, user has to agree to whatever form he is presented with. Even if a large body of users may not like a particular form, they have no choice but to yield. They can't decide for example what images should appear on a webpage, how page logo should appear, what color pattern should be adopted and so on. Ideologically, the complete ownership of form by the designer presents a dictatorial regime where traffic is unidirectional - from one designer to many users, from closed top to expanding bottom in a pyramid. ShiftSpace, an open source Firefox extension, inverts this style by allowing users to be participatory designers in this power structure. By allowing users to alter the way web page appears to them, it challenges the monopoly of the owners as far as *form* of the work is concerned. In the process, it replaces the traditional notion of designer (webpage designer at the back) with *designer-function*, as any lay user is given opportunity as well as resources to design the form for him and share that with others. It empowers the lay user to be a designer for form as well as content not owned by him.

The ideology behind invoking this trend is allowing user more freedom in regulating their web experience. Piggybacking on Greasemonkey script, ShiftSpace, is a javascript program that once invoked modifies the web page's code and installs its own functions which enable the user to do various actions on the web page like highlighting the text, creating sticky notes and swapping images. These functions are called Spaces and content generated by them are called Shifts which are publicly available. That means, other users with the same script installed can see your Shifts. By overturning the balance in the favor of the user, ShiftSpace makes the web experience literally interactive as compared to earlier times, when web pages were given to the users by the designers and users reacted to them passively, i.e. users had no authority how they wished to see a particular web page. That was decided by the owners at the back. Co-founder Mushon Zer-Aviv explains ShiftSpace's ideology as, "While the internet's design is widely understood to be open and distributed, control over how users interact online has given us largely centralized and closed systems. ShiftSpace attempts to subvert this trend by providing a new public space on the web" (Zer-Aviv, 2007).

ShiftSpace is supposed to be a utilitarian add-on with the explicit aim of providing user an edge over the webpage form. However, its intrusion into web space seems more like an overthrown of privately-owned

capitalist space by forcible open-source socialism. It allows user to create spaces barging into the content provided by the webpage owners by altering their form. User may add personal comments in these spaces and see others personal comments. It is its Image Swap function that alters the form of the page by altering the visual elements like images to be swapped with any other images on the web. Once Image Swap function is invoked, top left corner of every image on the page, be it a simple image, logo or advertisement, gives user the options of Swap and Grab. With Grab you pick the image and with swap, paste it down on any other image. The end may see user viewing the web page in a completely different way. User is more in a control of the aesthetic elements of the page than before.

The aesthetic experience is undoubtedly enriched; however, Image Swapping could be potential harm to various stakeholders. First, as obvious, it is an intrusion into the traditional designer's zone which was earlier inaccessible. It is more like a trespassing into a forbidden area whatever the ideology behind may be. As discussed earlier, open source is not against copyrighted material per se, making these open without the consent of their legal owners. It is against the proprietorship of knowledge, the restrictions posed by copyright regime, which restrains the free distribution of knowledge. If form and content both make a work complete, sanctity should be preserved in form as well. Whereas the author-function is not trespassing into private arenas, courtesy open source licenses, designer-function is, as the trespassing is into a protected zone without permission and derivatives made are shared with other users under Shift creators' Id without any credit to the original designer, of course!

Secondly, if the images relate to advertising, Image Swapping tends to be in direct conflict with advertisers. AddArt, another open source Firefox extension, for example, replaces the advertising images on the web page with artistic images provided routinely by its developers. With Addblock Plus in its entourage, the advertising images are first blocked and subsequently replaced by AddArt. The aim is to empower user to regulate what sort of stuff he would like to see on a webpage. Once installed, every ad-image is replaced with the artistic image by AddArt. Together, ShiftSpace and AddArt, with their Image Swapping lead to dissolution of designer-function.

It is here argued that AddArt does its so-called utilitarian duty without prior permission either from the owners of the website, or the advertisers. Consequently, it turns out to be more an intrusive than an utilitarian tool. Being an open source product, it creates a conflict between the ideology of OS as a movement and proprietary regimes and makes websites a battle zone of their conflicts. Not only the advertisers, but hosting page-owners stand to opposition. Who would like to advertise on pages where the ads are to be replaced by AddArt? Or swapped by ShiftSpace? OS aims at free distribution of works and with allowing of commercial distribution of derivatives, provided permission for so is obtained from the original authors with appropriate credits. It opposes the proprietorship of software, but not forcibly prohibiting their commercial selling. AddArt precisely does that albeit indirectly. It forcibly inhibits the advertisements appearing on others webpages in the name of providing greater aesthetic experience to the user. Replacing ad-images with their works is preventing them reaching the viewers, and thus the potential sale of their products. It comes out as in contradiction to OS as a movement.

Apprehending the flak from advertisers' side regarding the potential harm to advertising industry, the developers of AddArt defend their right to intrusion by saying,

Oh stop, you flatter us! Seriously, here's some things to consider:

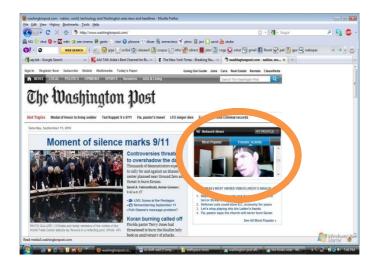
- You downloaded the page, and you own it. It's yours and you can do whatever you want to it. Just like if you get a free newspaper, you can read it, or cut it up, or burn it. It's your life and you have no legal obligation to look at every ad presented to you.
- People that use Ad Blocking software are not people that click on ads or even respond favorably to them. There is no loss in the market when these users block ads.
- If we extend the logic of Ad Blockers destroying the free iternet then online ad blocking pales in comparison to the number of people destroying the television industry by going to the bathroom during commercial breaks, thereby stealing that content from the television companies. Don't waste your time with us and go complain to them.
- Add-Art just replaces blocked ads with art. We didn't write the code that blocks ads, we just piggyback onto it ...and enthusiastically support it. If you want to complain about Ad Blockers, talk to the people at AdBlock Plus. But know that they've heard it all before and after hearing all those areguments they still don't agree, so you might just save your energy and do something else." [Spelling mistakes in original] AddArt (n.d)

Their newspaper argument is unwarranted because even if we own the newspaper copy we are not entitled to paste *our* news-items or pieces on it under *their* banner and re-circulate them. What we are entitled to is ownership of "physical medium" as German philosopher Gottlieb **Fichte** (1791) says, and not the ownership of "content". Their further insistence

of considering art and advertisement as different is also untenable and meant to tilt towards the justification of their own product. As long as advertisements relate to generating meaningful emotional experience in the viewer, it is definitely an art. Had it not been, there was no point in investing millions on building Brand Image by companies whose success depends upon how much viewers emotionally connect to it.

Even if analyzed a bit further their social aim of enriching user's aesthetic experience, AddArt's efforts are seriously wanting. All what AddArt does is replacing one image with another image selected by their "curator" which shuffles every two weeks. The images range from realistic portraits of unknown people, to surreal to almost disgusting. The kind of "art" displayed by these images at times is aesthetically obnoxious and unpleasant, let alone appealing (**Fig.1**).

Fig.1: The Washington Post website with replaced image by AddArt (Date: 11-09-2010)



On the one hand, it ruins the user's experience, on the other, it distorts the webpage radically. Advertisements are positioned on the website with harmony and balance between the advertising image and the rest of the content. The choice of colors, the layout, the positioning is all specifically designed according to the kind of advertisement and its placement on the site alongwith the site-owner's public profile. The principles for this are neatly governed by web aesthetics. Further, the aesthetic effects should be, "adapted to the target audience. A presentation site targeting a young audience must be designed in accordance with the contemporary trends in visual aesthetics and should differ from a presentation site that targets the general adult population." (Thorlacius, 2007b, p.67). AddArt replacements outrageously disregard all these aspects of web aesthetics, namely image-content harmony, the owner's image, genre and target audience. With apparent incompatibility between original work of art (in terms of shape, coloring, layout of the original image) that AddArt seeks to replace and the ad-space wherein that to be replaced, the result is almost nauseated as is shown in **Fig. 2**.

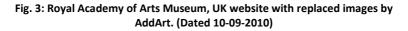


#### Fig. 2: Aaj Tak website with replaced images by AddArt (Date: 07-09-2010)

Note: The incompatibility between by replaced images and the Ad-space.

Consequently, the page is rendered more hideous than what it originally was with advertisement. Advertisements had one stakeholder having gains at least, AddArt leaves no-one, at least not the users! Unlike AddArt, paradoxically, it is advertisements that serve a utilitarian function by giving information about a product even if somebody chooses not to buy. The often disgusting images chosen by AddArt have what?

Though majority of the websites are created with the parameters of functionality and user-ease, yet significance of aesthetics, esp. visual aesthetics, can't be downplayed in the information they aim to convey. This is because of the increasing role the visual symbols play in contemporary culture as discussed above. Moreover, the sites whose primary objective is not functionality, but aesthetics itself, can be seriously damaged by tools like these. The sites in this genre include, cultural & heritage sites, art galleries, art museums sites etc whose main purpose is not to give the factual information to the user as news or shopping portals do, but visually present the cultural repertoire of a specific region or ethnic group. AddArt degrades the user's experience horribly in those sites (Fig. 3).





As regards the site-owners, it is a clear intrusion into their rights to ownership of form. Without their permission, contents removed and page distorted in the process. This subversion explicitly goes against the open source ideology. Open source is about creating platform for free sharing of sources, creating spaces and not forcibly trespassing into the others' private zones. Whereas ShiftSpace creates spaces forcibly into the form not owned by the users, AddArt distorts that form. Image Swap done by both of them is an intrusion into the designer's right to the form created by him. With designer dissolving into designer-function, the latter too comes to naught with ShiftSpace and AddArt. This dissolution is beyond salvage unlike author-function because the replacements, content-generation and swaps can be observed globally and shared with other users via ShiftSpace Server. That is, the shifts created by one user on BBC's website, for example, whether notes or swaps, can interactively be shared by another users of ShiftSpace thereby providing an altogether new experience of the site (Fig. 4 & Fig. 5).

Once logging-in, one can see all the shifts created on a particular site by all the users using this tool. Unlike AddArt, ShiftSpace empowers users to

customize image-replacement and also enables them to share their adventure with other users by *saving* their shifts in the ShiftSpace' server.

# Fig. 4: Shifts created by author and other users on BBC site alongwith Image Swap by SS (Date: 09-09-2010).

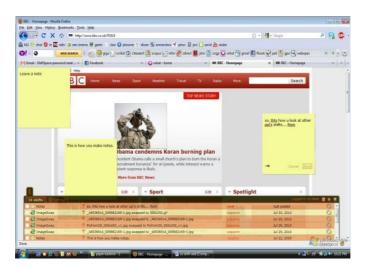
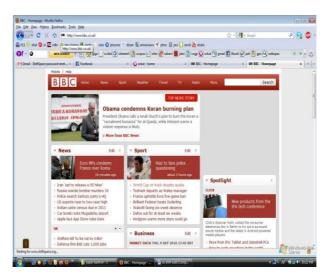


Fig. 5: Original BBC Page before invoking ShiftSpace (Date: 09-09-2010).



Further, there is ideological conflict between the aims of AddArt and its work. Their philosophy is to prevent user from experiencing unwanted advertisements by replacing them with the art images. Since user is not in

control to decide the kind of art he is going to see, an equal rejoinder can be made to AddArt that because of it, users are made to see art which the developers want to show, as artistic images are not selected by the users themselves. If their ideology is to ease user from forcible and annoying advertisements, their artistic images come equally in the trap for these too are forcible and annoying most of the time. The conflict is not just between the ideologies of these tools and OS movement as such, but among them as well. The two tools can come into mutual conflict when used one after another. Of what use is the entire effort if AddArt replaces an ad with an artistic image, and ShiftSpace has to change that later with its Image Swap? Say, with the same image picked from another website! This cycle seems to be of nobody's use in the end (**Fig. 6**).

# Fig. 6: AddArt artistic image swapped by ShiftSpace Image Swap Double replacement. First AddArt replaces Ad-image with its art image, then SS replaces that art-image with another Art image (Date: 07-09-2010)



#### Conclusion

Though as OS tools, ShiftSpace contribute in creating space over web, thus serving a utilitarian purpose; same can't be said about its Image Swap function which is more an intrusion into the other's privately owned space. This intrusion is gross and complete with AddArt, another OS tool. Together, both of these lead to the dissolution of designerfunction in cyberspace, a practice which does not serve anything of utility to either to designer or the end user. On the one hand, these distorts the form of the webpage completely, on the other, ruins the aesthetic experience of the user as well.

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