

Mozaiq: An Inclusive Tool for Curating and Personalizing 2D Stock Animation for
People of all Ethnic Backgrounds

by

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Abstract

When it comes to diversity, and inclusion, what does the current 2D animation landscape look like? This paper offers an in-depth review, and critique of the two most commonly used animation software platforms, *Powtoon* and *Animaker*. It highlights the diversity gaps found within these platforms, whilst proposing a platform (*Mozaiq*) that could potentially bridge these gaps, and provide more inclusive storytelling for all.

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1. Introduction

Mozaiq is an inclusive tool for curating and personalizing 2D stock animation, for people of all ethnic backgrounds. The current stock animation landscape is limited in its representation, and I have been working to develop the first easily accessible product that bridges this gap, and opens the stock animation ecosystem to users of every ethnic and cultural background. Representation matters, and the current norm is restricted to the depiction of a limited, and often Caucasian group. We want *Mozaiq* to empower everyone to tell the stories that matter to them, and thereby have their experiences recognized and included. We believe that our tool can be an agent of change, and a cultural facilitator. As our culture is composed of the stories that we tell, we hope to enhance the variety of stories that people of any identity feel they can share, and as a result change our culture's storytelling landscape for the better. To make this meaningful impact, we acknowledge that there are two components to *Mozaiq*: the product, and the conversation. As a product, it will promote action towards disrupting unchallenged and archaic messages that are inherently racist, sexist, and exclusive to a limited range of body types. We want to go beyond conversations and thought-provoking opinion pieces. We want to equip the underrepresented and misrepresented with the tools they need to illustrate immersive imagery.

2. Main Body

2.1 Stock Imagery Landscape

A keyword search on “stock images”, and “diversity” quickly produces a variety of articles about the lack of diversity in stock images. In line with recognizing this disparity, entrepreneurs and established brands are taking action. Platforms like *Shutterstock*, *Getty Images*, and *Canva* have set forward initiatives to produce more images that have balanced representations of people of colour. In late 2018, *Canva* kicked off its “Natural Woman” collection. Here *Canva* states they acknowledge the importance of “seeing more empowered images of women who are portrayed for what they are DOING rather than just BEING”¹. *Canva* continues by stating:

“...despite a global audience that is constantly evolving, the majority of female representation in the mainstream media still sticks to the same old clichés. The standard appearance for a female stock model is young, slim, traditionally attractive, and Caucasian. Which isn’t to say that there hasn’t been any noticeable growth over the last decade. In recent years, the most popular images of women in stock photography have graduated from half-dressed women lounging in bed or politely laughing over salads to

¹ Girl Talk HQ: “Natural Women” Collection Changing Female Representation In Stock Photography. (2018, December 05). Retrieved from <https://girltalkhq.com/canvas-natural-women-collection-changing-female-representation-in-stock-photography/>

ones exerting power over a boardroom or defiantly scaling rugged mountaintops.”²

In 2017, *Getty Images* launched a campaign in conjunction with the women-centered platform, *Refinery29*, to increase the amount of diverse imagery available; they have also released a series of images about female athletes in the hopes that media will use more empowered images³. Entrepreneurial ventures like *BRWN Stock Imaging*, *CreateHer Stock*, and *Pixels in Colour* seek to flood the stock image landscape with images of women from a diverse set of ethnic backgrounds. The founding of these organizations are similar—many of these business ventures started from a point where the founder was looking for a specific type of image, before quickly realizing that this type of image was not available. Like myself, they recognized the gap, and chose to address it. Uniquely, I do not necessarily want to focus on just women; the process should be open, and available to everyone. While I do support initiatives like the ones set forth by Canva and Getty Images, there are concerns that revolve around the intersectional nature of the final product. If these images consist of empowered representations of women *doing* things, will they also be racially balanced as well? In her essay, *Decolonizing Graphic Design*, Maria Rogal cites that “the act of representing a person or a group of people, whether in writing, verbally, or visually—in one or any number of available of mass mediums—serves as an act of inscribing identity onto them”. Rogal focuses on collaborating with the

² Canva: “How Canva’s Natural Women Collection is changing the future of female representation in stock photography” <https://www.canva.com/learn/canvas-natural-women-collection/>

³ Girl Talk HQ: “Natural Women” Collection Changing Female Representation In Stock Photography. (2018, December 05). Retrieved from <https://girltalkhq.com/canvas-natural-women-collection-changing-female-representation-in-stock-photography/>

indigenous Maya people in Mexico and acknowledges the ways in which “representations, when repeated, create a narrative which becomes our understanding of the ways things are representations construct our reality.”⁴ By creating a platform where the user is able to personalize, and curate their animation, they assert agency over how they are represented. This opens up an opportunity for them to narrate their experience, and effectively bring to life a reality that may not be circulating in many spaces. By definition, this is empowering and democratizing. Rogal notes the importance of sharing and reciprocity, as they involve “working out agreements that support collective survival.”⁵ It is challenging to avoid getting overly political as race and representation is political in nature, and exploring these topics are integral to developing a viable product. In my initial research, I came across numerous companies and campaigns that were working to address the lack of diversity in stock images. Many founders were freelance photographers themselves. They took action by going out and taking photos of subjects, and scenarios that they felt were absent within the current landscape. For *Mozaiq*, I want to take this same idea, but also make it applicable to animation. While the problem is quickly being addressed in the stock photography space, the stock animation space is

⁴ Rogal, M. (2015). Decolonizing graphic design, presented at European Academy of Design Conference, Boulogne Billancourt. 2015. Boulogne:
http://www.academia.edu/24922507/DECOLONIZING_GRAPHIC_DESIGN

⁵ Rogal, M. (2015). Decolonizing graphic design, presented at European Academy of Design Conference, Boulogne Billancourt. 2015. Boulogne:
http://www.academia.edu/24922507/DECOLONIZING_GRAPHIC_DESIGN

filled with limitations. I have yet to see a platform similar to mine that includes stock animation in their content, the only exception being Mocha Stock which comes close by offering illustrations and animations in an à-la-carte selection which, while providing the user with the opportunity to build or make tweaks to the illustration or animation, tends to be restrictive.

2.2 Stock Animation (*Powtoon and Animaker*)

When it comes to popular whiteboard animation platforms, two that are commonly used within academic and professional spaces are: *Powtoon* and *Animaker*. Platforms like these are frequently used by people, with limited to non-existent animation backgrounds, to produce explainer and marketing videos. I was exposed to the diversity problem within this landscape when several classmates and colleagues suggested that I try one of these platforms to make an explainer video for a final class assignment. The user experience when using *Animaker* is slow and cumbersome. The program can be problematic for user computers, as it tends to negatively affect functionality. Despite this physical issue, I was able to navigate the website, and select the blank template for my video. Once I selected “use”, an icon appeared to signify that the next page was loading.

I stopped, and refreshed a few times before I closed the window all together. Switching to Safari, I had a smoother experience and was able to select a blank template under their 2D theme, and take a look at *Animaker's* offering of animations. For the free designs, *Animaker* offers six animations. There are two

different design styles, and only one animation with what seems like a person of colour (Figure 1, third image).

Her ethnicity is ambiguous, but we know that her complexion is brown, and the woman is dressed in a professional outfit.

Their whiteboard theme does not offer any free selections, and is limited to a white male, and female.

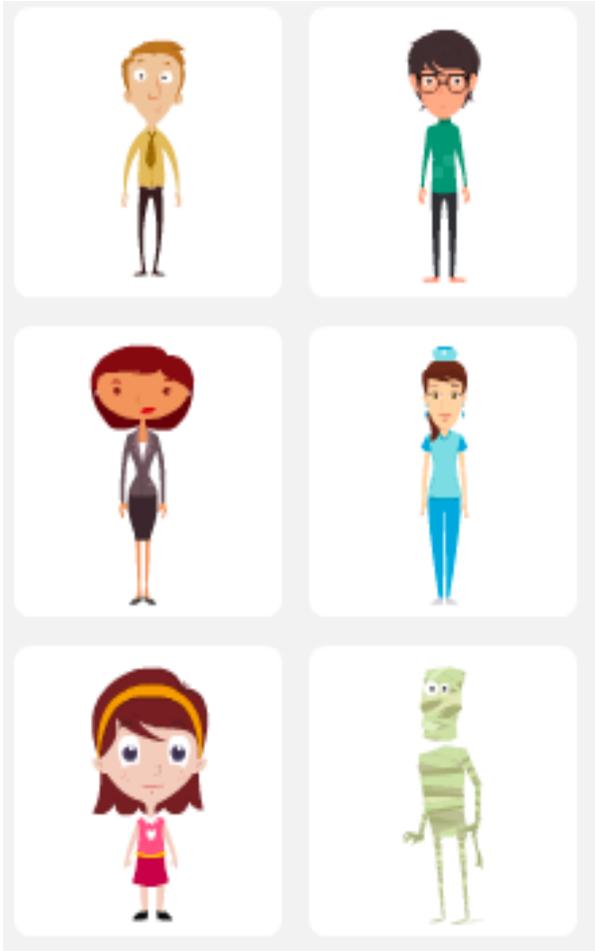


Figure 1: Animaker "2D" Animation Free Selections 6

⁶ *Animaker Pro 2D Animations Selections*. [Screen grab]. (n.d). Retrieved August 14, 2019, from <http://www.animaker.com>.

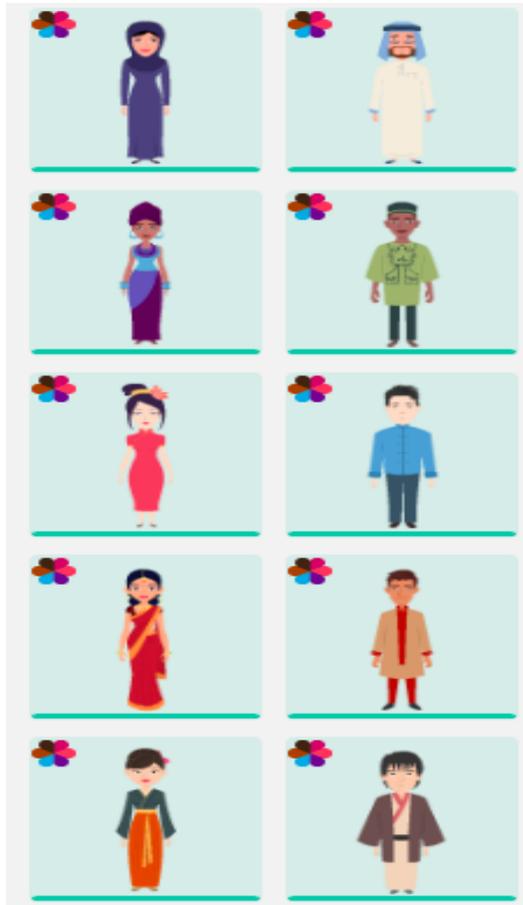


Figure 2: Animaker Pro 2D Animations Selections⁷

For *Animaker's* premium offering, you see a better selection of diversity with their designs: With these premium selections, you see male and female depictions of Muslim, Arab, Black, South Asian, and Asian ethnicities. It is important to note that these are not representations, but caricatures. *Animaker* failed in their attempt to be inclusive, and diverse. These designs are binary, they re-enforce tropes, and they are singular narratives.

For example, it is unclear if the top design is intended to represent an Arab man and woman, or a Muslim man and woman. They are not one and the same. These *Animaker* designs imply that one cannot be black and Muslim, or South Asian and not wear a sari, or any other traditional and formal wear. People from these ethnic and cultural backgrounds often function in society outside of these stereotypes, but is this an obvious conclusion for everyone?

In the case of *Powtoon*, I found it was a more streamlined experience to use, without the functionality issues found in *Animaker*. Once logged into

⁷ Animaker Pro 2D Animations Selections, [Screen Grab]. (n.d). Retrieved August 14, 2019, from <http://www.powtoon.com>.

Powtoon, you are prompted to select a “look”. The options provided are: modern edge, whiteboard, cartoon, infographic, and real. In the case of modern edge, whiteboard, and cartoon, an animation of a person in this particular style is provided as an example. It is important to note that in each example, the animation is that of a Caucasian person. *Powtoon* has a batch of animations that are free, then a wider selection of “Pro” options. When selecting the free whiteboard theme, the following options are available in the free selection:

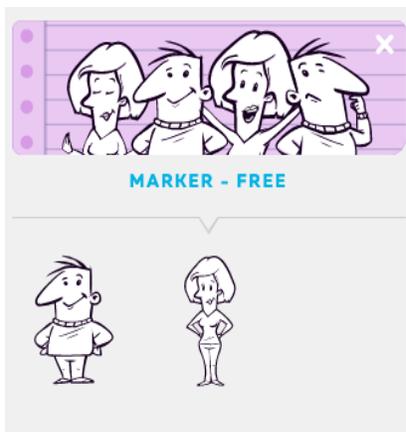


Figure 3: Powtoon “Whiteboard” Free 8

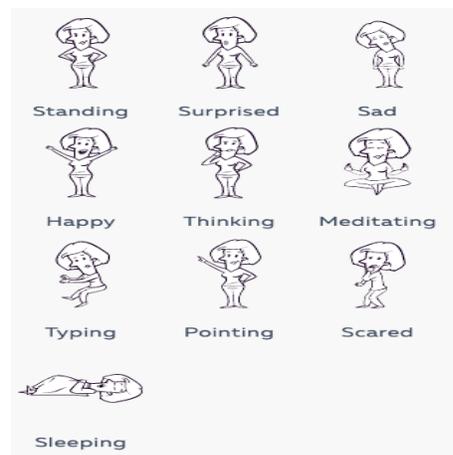


Figure 4: Powtoon “Whiteboard” Free Animation of woman9

⁸ Powtoon “Whiteboard” Free Animation of man and woman. [Screen Grab]. (n..d). Retrieved August 14, 2019, from <http://www.powtoon.com>.

⁹ Powtoon “Whiteboard” Free Animation of woman. [Screen Grab]. (n..d). Retrieved August 14, 2019, from <http://www.powtoon.com>.

In the search bar, I typed “black woman”, and I was provided with these results in Figure 5. Rather than offering a collection of animations that represent a black woman, the software offers a selection of two animation types where the woman is dressed in black. Also, these animations are only available in the paid “Pro” version, and no options are provided in the financially accessible free version.

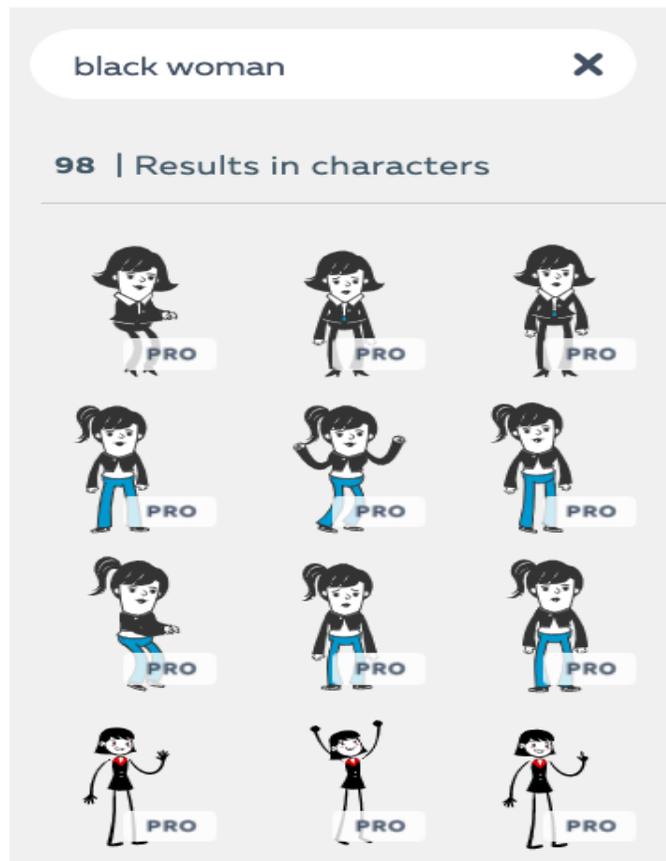


Figure 5: Powtoon Pro “Black Woman” search result¹⁰

Quickly jumping to the modern aesthetic within *Powtoon*, we see a shift in the positive direction regarding diversity in animations. In the free “office” category, we see a diverse selection of animations where multiple ethnic, and cultural groups seem to be represented. While this is certainly an improvement,

¹⁰ *Powtoon Pro “Black Woman” Search Result*. [Screen Grab]. (n.d). Retrieved August 14, 2019, from <http://www.powtoon.com>.

there are a few important points to note with this look's options in both its free and Pro animations. Firstly, there is no diversity in the body types of the animations. Every option is animated with a slim figure, and there is no option to modify or adjust the physical shape of the animations. Another limitation consists of some categories only providing the option of white children animations, and no option for any other ethnic group. A quick way to address this would be to offer the user the chance to adjust the complexion of the animation, but this is not available even with the paid version of *Powtoon*. These findings are disappointing for such a premiere and costly content production platform. The free versions of *Animaker* and *Powtoon* are limited in the content the user has access to, as well as in the format that they are able to download and distribute. For example, if one wants unlimited access to content with *Powtoon's* Pro version, users are given the option to pay an annual fee of \$708USD up front (\$59USD/month). The medium option does not provide unlimited access to content, and still comes with annual billing rate of \$228USD. *Animaker's* pricing is more reasonable, but *Powtoon's* capabilities and offering is more robust. In *Powtoon*, prospective clients are welcome to select monthly plans, but fees jump dramatically, and come with their own set of limitations. For users who are willing to pay for more options, and as a result, diversity, the type of representations at the premium level do not offer a fluid range of options. In fact, it could easily be argued that the sheer fact that one has to upgrade and pay to produce content that is an appropriate depiction of our cultural landscape is problematic. This is due to the fact that it treats the representation of all complexions as inherently

unequal, given that the Caucasian ones are presented as the “default” option, and most importantly, that they are cheaper or free to use, in contrast with the other complexions they offer. This may well perpetuate other forms of bias and unequal opportunity for those of all backgrounds to see themselves in this imagery and to tell the stories that they wish, in whichever way they wish.

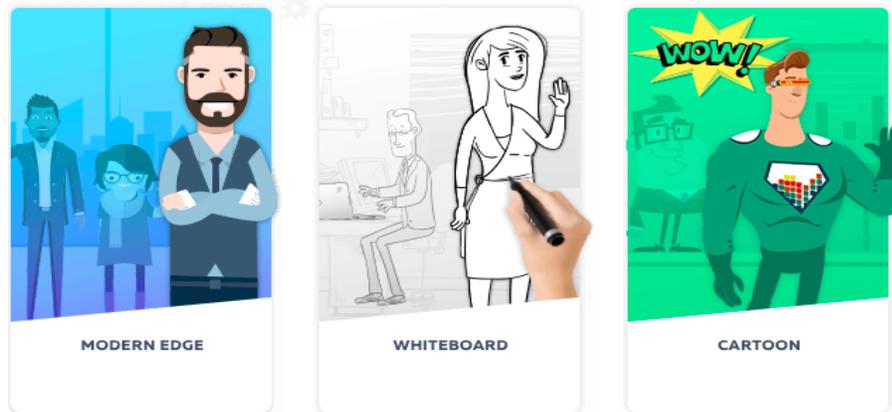


Figure 6: Powtoon Welcome Screen and display of themes¹¹

The image in Figure 6 is *Powtoon's* welcome screen, which encourages the user to pick an aesthetic for their video. Each category uses a Caucasian character to represent the look and category. A simple solution would be to replace some of these characters with more racially diverse representations. This way, when a user selects their preferred category, they have activated their contribution to this socially impactful conversation. An even simpler suggestion is to increase the number of animations, and ensure that they are more inclusive across the racial and gender spectrum. If platforms like *Powtoon* and *Animaker* have built their entire brand around content production, it is within their fiduciary interest to provide their community of users with more content. This is because of

¹¹ *Powtoon Welcome Screen and display of themes*. [Screen Grab]. Retrieved August 14, 2019, from <http://www.powtoon.com>

the position of power and responsibility that they maintain in this landscape, as they hold the tools, and the ability to tweak them, so that they either include or exclude the potential stories that anyone may wish to tell.

2.3 Digital Divide

Digital Divide refers to the “economic, educational, and social inequalities between those who have computers and online access and those who do not.”¹² For example, in the case of when I attempted to use *Animaker* and found myself encountering technical difficulties. Eventually it started to work, but it took some time, and the cause of the glitch is probably due to *Animaker’s* reliance on the dated Flash software. In the end, this encounter with the digital divide was not very dramatic, as the *Animaker* offering proved itself to be underwhelming and an excellent example of the diversity gap within stock animation software. However, what about in a better case scenario, where a platform like *Mozaiq* was to go to market, and possess an offering that gave the user the opportunity to develop the animation that they desire? With a solution-centred platform, how do you make it accessible and easy to use for even the most computer-illiterate user? As stated before, *Mozaiq* has a secondary component that revolves around the platform’s social impact. It is easy to onboard someone who is part of the underrepresented and misrepresented communities, but how do we alter the perspectives of the less involved and socially privileged? How do we challenge and disrupt these

¹² Merriam Webster: “Definition of Digital Divide”. (n.d), Retrieved from <https://www.merriam-webster.com/dictionary/digital%20divide>.

norms? Or better yet, how do we evolve to a place where it is as intuitive for a white male developer to recognize a racially problematic narrative within an image? Despite being a black-Muslim woman, I too recognize my privilege within this process. When I discuss this important topic, I present it to other educated, like-minded people. Even as a person of colour with economic mobility, it is important to recognize the more subtle forms of intellectual isolation. The digital divide is not only a hardware issue, but also a knowledge-based issue. It could be as simple as having the knowledge to switch browsers when troubleshooting with new software. A less knowledgeable user would just close the window, and not understand that it is likely a software issue that is hindering the page's functionality. This is well before we can even begin to make an impact with more inclusive and culturally representative content. It is important to be mindful of this when working to bridge gaps of this nature. In this context, providing communities with the most updated technology does not guarantee that they will update their perspectives out of their own volition. We have to subtly suggest and reverse the narrative.

The upside to the current landscape is that the solutions seem relatively simple. However, the other question is if these are such obvious problems, why have they not been recognized and addressed? In the case of *Animaker*, there needs to be a smoother and cohesive user experience. There has to be a better way to run the software without relying on Flash, or front-end components that take up so much RAM and make the experience cumbersome for the user. Beyond the hardware problem, the program can also benefit from presenting

more balanced representations of people of colour. A user looking to make a Muslim female character should not be limited to selecting an Arab-looking character. There should be fluidity in the character building process, where the user can select complexion, hair texture, wardrobe, and so on. In the case of *Powtoon*, while they have a better offering and a more appropriate array of diversity and characters, users are unable to adjust body and mobility type.

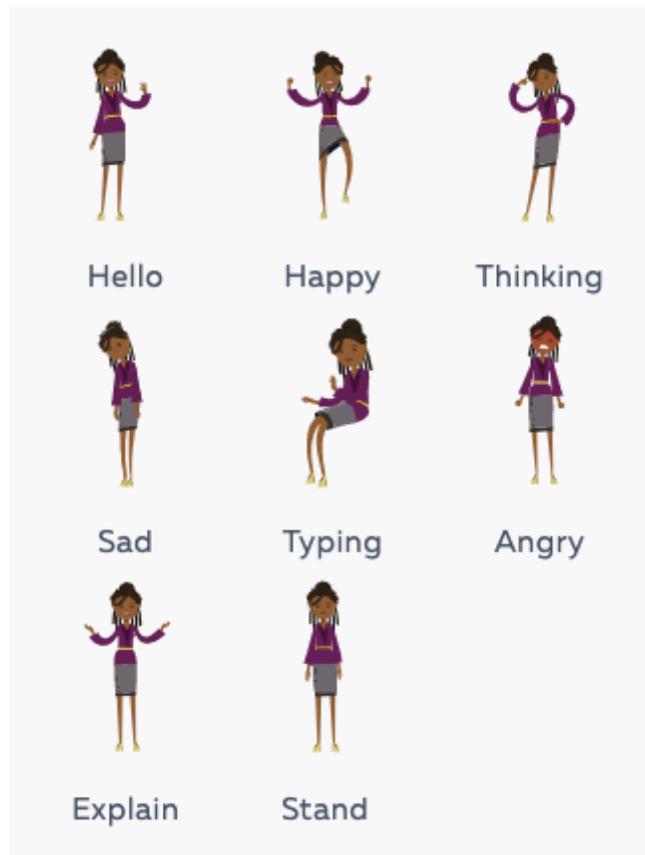


Figure 7: Powtoon Pro “Black woman with dreads” Animations¹³

¹³ Figure 7: *Powtoon Pro “Black Woman with dreads” Animations*. [Screen Grab]. (n.d). Retrieved August 14, 2019, from <http://www.powtoon.com>

3. Conclusion

For both software platforms, everything is relatively one note. Anyone with some graphic design experience can use their trusted resources to build something that perfectly fits their needs. However, this solution is not afforded to the average person. With something like *Animaker* and Powtoon, what you see is what you get. You are left with a static offering that cannot be tweaked or adjusted. A way to bridge this gap is by releasing the rigid selection process, and giving the user the liberty to build their animation. Bodily features (complexion, hair, face shape, eye colour, etc) can be adjusted, and cultural accessories could be added. Currently the nuance and vibrancy is removed in telling the stories of these characters. As a result, it stifles the storytelling journey. A progressive step would be to firstly recognize the issue. A subsequent step would be to apply this knowledge and begin actively working on altering these archaic and divisive tools that have left certain cultural and ethnic groups outside of the conversation. After all, “there’s power in allowing yourself to be known and heard, in owning your unique story, in using your authentic voice.”¹⁴

¹⁴ Obama, M. (2018). *Becoming*. New York, NY: Crown.

REFERENCES

- 1) Girl Talk HQ: "Natural Women" Collection Changing Female Representation In Stock Photography. (2018, December 05). Retrieved from <https://girltalkhq.com/canvas-natural-women-collection-changing-female-representation-in-stock-photography/>
- 2) Canva: "How Canva's Natural Women Collection is changing the future of female representation in stock photography"
<https://www.canva.com/learn/canvas-natural-women-collection/>
- 3) Girl Talk HQ: "Natural Women" Collection Changing Female Representation In Stock Photography. (2018, December 05). Retrieved from <https://girltalkhq.com/canvas-natural-women-collection-changing-female-representation-in-stock-photography/>
- 4) Rogal, M. (2015). Decolonizing graphic design, presented at European Academy of Design Conference, Boulogne Billancourt. 2015. Boulogne: http://www.academia.edu/24922507/DECOLONIZING_GRAPHIC_DESIGN
- 5) Rogal, M. (2015). Decolonizing graphic design, presented at European Academy of Design Conference, Boulogne Billancourt. 2015. Boulogne: http://www.academia.edu/24922507/DECOLONIZING_GRAPHIC_DESIGN
- 6) *Animaker "2D" Animation Free Selections*. [Screen grab]. (n.d). Retrieved August 14, 2019, from <http://www.animaker.com>.
- 7) *Animaker Pro 2D Animations Selections*, [Screen Grab]. (n.d). Retrieved August 14, 2019, from <http://www.powtoon.com>.
- 8) *Powtoon "Whiteboard" Free Animation of man and woman*. [Screen Grab]. (n..d). Retrieved August 14, 2019, from <http://www.powtoon.com>.
- 9) *Powtoon "Whiteboard" Free Animation of woman*. [Screen Grab]. (n..d). Retrieved August 14, 2019, from <http://www.powtoon.com>.
- 10) *10 Powtoon Pro "Black Woman" Search Result*. [Screen Grab]. (n.d). Retrieved August 14, 2019, from <http://www.powtoon.com>.
- 11) *Powtoon Welcome Screen and display of themes*. [Screen Grab]. Retrieved August 14. 2019, from <http://www.powtoon.com>
- 12) Merriam Webster: "Definition of Digital Divide". (n.d), Retrieved from <https://www.merriam-webster.com/dictionary/digital%20divide>.

- 13) *Powtoon Pro "Black Woman with dreads" Animations*. [Screen Grab]. (n.d). Retrieved August 14, 2019, from <http://www.powtoon.com>
- 14) Obama, M. (2018). *Becoming*. New York, NY: Crown.