

# The Creative Remediation and Promotional Use of Photographic Modes in Digital Games

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## ABSTRACT:

From photoblogs to mobile phone cameras, digital technology is rapidly and fundamentally changing the cultural practice of photographic representation. Across games and gaming communities, the aesthetics of screenshots and the aesthetics of photographs are increasingly intertwined. The latest photographic modes in digital games mimic real photographs by incorporating controls that are found in physical cameras and allow for great creativity, yet yield some limits and potential issues. The aim of this explorative study is to describe the creative potential of the specific functionality of photo modes in digital games, the intent and development of the tool, promotional uses, and the limits of the emerging art form of virtual photography.

## KEY WORDS:

digital game, photographic mode, remediation, screenshot, virtual photography.

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# Introduction

In general, the process of taking photos has already been integrated into digital games as interactive mechanics where players can encounter it even without an active interest in photography. For example, *Martha is Dead*<sup>1</sup> is a digital game based on photography and the process of making photographs (photo development). In *Life Is Strange*<sup>2</sup>, the players must take photos of the main character, Max Caulfield, at the right times and in the right places. Since the shots are all predetermined, the players have no opportunity to take bad photos, thus Max's images are always technically and compositionally perfect. In *Dead Rising*<sup>3</sup>, The journalist Frank West takes photos to obtain specific rewards – the gorier, scarier, and sexier the photography, the more prestige points it brings. In a sense, Frank is a mercenary with a camera instead of a gun, making this a different type of first-person shooting (FPS) digital game. From a mechanical point of view, firing a gun in an FPS digital game and pressing the shutter of a camera in a 'first-person shutter' digital game are not so different.

A slightly different example of incorporating photographic processes into digital games is related to the genre of simulation digital games, so-called simulators. These digital games simulate various activities, processes, things, and 'life' of human and non-human beings. Often used as secondary educational tools as advised by M. Prensky,<sup>4</sup> simulators are found in various contexts and areas (from healthcare to government) or being directly developed as *serious games*.<sup>5</sup> An example is *Birding Simulator: Bird Photographer*<sup>6</sup>

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1 LKA: *Martha is Dead*. [digital game]. Watford : Wired Productions, 2022.

2 DONTNOD ENTERTAINMENT, DECK NINE: *Life Is Strange (series)*. [digital game]. Tokyo : Square Enix, 2015-2022.

3 CAPCOM PRODUCTION STUDIO 1: *Dead Rising*. [digital game]. Osaka : Capcom, 2006.

4 PRENSKY, M.: *Teaching Digital Natives: Partnering for Real Learning*. Thousand Oaks, CA : Corwin Press, 2010, p. 156.; See also: PRENSKY, M.: *Digital Game-Based Learning*. New York, NY : McGraw Hill, 2001.

5 For more information, see: MICHAEL, D. R., CHEN, S. L.: *Serious Games: Games That Educate, Train, and Inform*. Boston, MA : Thomson Course Technology PTR, 2005.; FELICIA, P., EGENFELD-NIELSEN, S.: *Game-Based Learning: A Review of the State of the Art*. In EGENFELDT-NIELSEN, S., MEYER B., HOLM SØRENSEN, B. (eds.): *Serious Games in Education – a Global Perspective*. Aarhus : Aarhus University Press, 2011, p. 21-45.

6 Remark by the authors: The development of the game is in its final stages. Demo version of the game is already available on the Steam platform.; See: T-BULL: *Birding Simulator: Bird Photographer (demo version)*. [digital game]. Wrocław : T-Bull, 2022.

an in-development 'first-person shutter' and exploration game, offering a wide range of professional photography equipment and observation equipment. Players can swap lenses and binoculars, and set all parameters on virtual cameras that are identical to physical cameras to take pictures of unique and rare bird species in different parts of North America.

The digital age has proliferated the number of skilled photographers primarily through self-phone cameras, and other types of technology. The average person is now fairly confident in their ability to take pictures specifically using a filter app allowing any picture to look professional. Technology is getting better and automating various technical aspects of photography. Despite these technical changes the individual or photographer is still required to frame the picture. They changed the ontology of the image from an indexical understanding of the image to an algorithmic computation, thus changing the syntax of the image as text.<sup>7</sup> The photograph became an algorithmic open-ended image. Across games and gaming communities, the aesthetics of screenshots and the aesthetics of photographs are increasingly intertwined, in many cases making it difficult if not impossible to determine which is a screen shot and which is a photograph.

In-game photography, also known as *virtual photography*, is a new form of media art that consists of taking screenshots of digital game worlds. These screenshots of unique situations that happen while playing the digital game, such as displaying found objects or capturing and sharing visually appealing shots of the landscape that the player encounters while exploring the digital game come from the game's specific functionality of digital game photo modes. These images often perform the same function as photographs in the physical environment: they point to events and happenings, documenting the seen gaze. Recording the virtual world with this technique fulfils the author's intention as photographs in a real environment: they expose the events of a person and document the author's momentary interest and point of view.<sup>8</sup> Photography within digital games presents possibilities and opportunities for representation and expression that are unique to the genre. To this end, the ability to remediate the digital game camera and manipulate a point of view is essential. According to J. D. Bolter and R. Grusin, new media transform older media, retaining some of their features while discarding others. It is "the formal logic by which new media transform earlier media forms".<sup>9</sup> The tool gives players creative control over composition and subject matter, and thus allows the photographer to make creative choices in the work. This is significant because it allows players to create original works even within existing works that do not appear in other media (Picture 1). This remediation of photography is found both in technical and cultural fashion within the digital game. Historically conventions and entire narratives related to the camera have played a role in some digital game genres, but increasingly a more literal transposition of photography is coming into play.

The aim of this explorative study is to describe the creative potential of the specific functionality of photo modes in digital games, the intent and development of the tool, promotional uses, and the limits of the emerging art form of virtual photography. As more gamers explore the photo mode to create stunning photography this will become more closely defined. There is a potential for digital game photography to even become its own genre. There are many reasons why the photo mode has captivated players. Primarily it allows gamers to see the game world in a brand-new way and provide the opportunity to take a closer look at the surroundings created for the game. These two factors allow gamers to appreciate games in a way that has never been done before. This is one step to

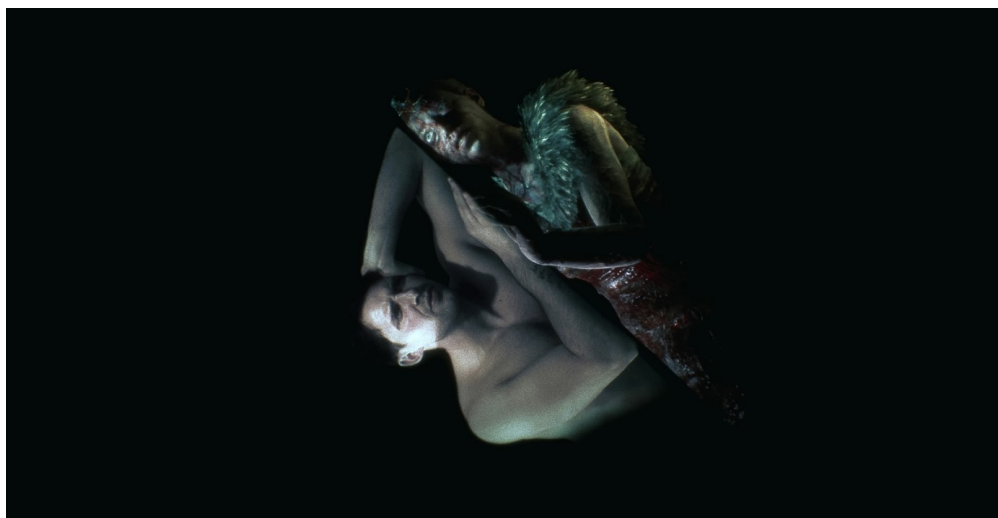
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7 LÁB, F.: *Postdigitální fotografie*. Prague : Karolinum, 2021, p. 19.

8 POREMBA, C.: Point and Shoot, Remediating Photography in Gamespace. In *Games and Culture*, 2007, Vol. 2, No. 1, p. 50.

9 BOLTER, J. D., GRUSIN, R.: *Remediation: Understanding New Media*. Cambridge, MA : MIT Press, 2000, p. 273.

promote brands using images in brand promotion which has arguably become one of the most valuable assets. This can create images specific to a digital game product allowing user generated content as well as SCO techniques to promote these digital games in a unique and relevant manner.



Picture 1: Virtual photography from the game Hellblade: Senua's Sacrifice

Source: the screenshot taken by Ł. P. Wojciechowski in the digital game: NINJA THEORY: Hellblade: Senua's Sacrifice. [digital game]. Cambridge : Ninja Theory, 2017.

## Creative Potential of Virtual Photography

Like many other creative arts, virtual photography often starts as an amateur hobby. Like other non-committal creative pursuits, photography can become an immersive activity that sparks passion in people and can lead to more serious semi-professional and even professional work. Virtual photography evokes the same passion and can lead to more serious pursuits. Virtual photographers are most often a group of gamers who do not work directly in digital game development but are a group of enthusiasts who present their impressions of the digital game through the virtual art of the digital game, as well as visual interpretations through their own digital art. Virtual photographers often draw on the compositional principles of traditional photography, painting and illustration, and graphic design, and use a variety of tools to achieve their artistic goals. Professional 'screenshotter' P. Levälähti (using the nickname Berdu) says: "(Like any hobby) it's fun, it's something you can better at, and it has a community around it. Of course, there are personal goals and demons – chasing the high of getting a good shot and rarely being happy with the results".<sup>10</sup>

The work of the virtual photographer relies on the work of others, yet ultimately provides a unique interpretation of that creative work. The creation of the shots is an expression of gratitude to all the artists who have participated in the creation of these virtual

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10 QUILLFELDT, T.: *Virtual Photographers Prove That Video Games Are Art*. Released on 18<sup>th</sup> May 2021. [online]. [2022-05-15]. Available at: <<https://www.lacedrecords.co/blogs/news/virtual-photographers-prove-that-video-games-are-art>>.

worlds. Virtual photographers explore deep into corners with a photographic gaze that reveals images that remain unrevealed in the digital game's predicted storyline or ignored after focusing on the main 'dictated' plot. These places catch the eye, and the virtual photographers take a very sensitive and detailed approach to the shots they want to catch (the repetitive backtracking to the point of interest of the shot is no exception). They concentrate on capturing exactly the right direction of gaze and facial expression to convey the atmosphere of the environment, but most importantly the emotions that the character carries with them within their role. In some cases, however, it is necessary to find a rare Shutterbug moment (like brief moments during ghost attacks; in the *Fatal Frame*<sup>11</sup> series, where cameras are not tools, but weapons used to fight the lost spirits). These moments are fleeting and hard to find, but they are crucial.

The latest photographic modes mimic real photographs by incorporating controls that are found in physical cameras. Features such as focal length, aperture, exposure, and colour grading allow photographers to use many of the same techniques and principles as in the real world when composing images in-game. These tools provide more room to be creative. C. Taljaard (nicknamed CHRISinSESSION), a virtual photographer, finds "having more control of things like tilt control and in-game weather is what pulled me towards virtual photography in the first place. The more control, the more creative freedom you have to express yourself".<sup>12</sup> Some digital games like *Marvel's Spider-Man: Miles Morales*<sup>13</sup> and *Star Wars Jedi: Fallen Order*<sup>14</sup>, as part of a photography mode through the substitution of locating and tilting simple light sources, are moving towards more control over lighting, for example by adding customizable spotlights. This can also be through adjusting basic colour grading in *Days Gone*<sup>15</sup>, controlling the pose, grimace, and positioning of a character in *Cyberpunk 2077*<sup>16</sup>, or as in *God of War*<sup>17</sup> adding a smile to a character displaying permanent anger. Other examples come from *Ghost of Tsushima*<sup>18</sup>, where gamers can control aesthetic elements of the environment, or in *The Last of Us Part II*<sup>19</sup>, which has tools supporting the creation of a motion blur effect. These elements, which may vary from digital game to game, represent a unique component of the mode. There are various YouTubers who lecture and explain the rules of photography that also apply to physical photography, by using examples such as these.

In real photography, there is a concept developed by the photographer considered to be the founder of modern photojournalism, H. Cartier-Bresson, called the 'decisive moment' (*un moment décisif*).<sup>20</sup> It is the critical moment when everything is in place and the split second before and the split second after are not the same. This moment forms

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11 KOEI TECMO. GRASSHOPPER MANUFACTURE, NINTENDO SOFTWARE PLANNING & DEVELOPMENT: *Fatal Frame (series)*. [digital game]. Yokohama : Koei Tecmo et al., 2001-2014.

12 QUILLFELDT, T.: *Virtual Photographers Prove That Video Games Are Art*. Released on 18<sup>th</sup> May 2021. [online]. [2022-05-15]. Available at: <<https://www.lacedrecords.co/blogs/news/virtual-photographers-prove-that-video-games-are-art>>.

13 INSOMNIAC GAMES: *Marvel's Spider-Man: Miles Morales*. [digital game]. San Mateo, CA : Sony Interactive Entertainment, 2020.

14 RESPAWN ENTERTAINMENT: *Star Wars Jedi: Fallen Order*. [digital game]. Redwood City, CA : Electronic Arts, 2019.

15 BEND STUDIO: *Days Gone*. [digital game]. San Mateo, CA : Sony Interactive Entertainment, 2018.

16 CD PROJECT RED: *Cyberpunk 2077*. [digital game]. Warsaw : CD Project, 2020.

17 SANTA MONICA STUDIO: *God of War*. [digital game]. San Mateo, CA : Sony Interactive Entertainment, 2018.

18 SUCKER PUNCH PRODUCTIONS: *Ghost of Tsushima*. [digital game]. San Mateo, CA : Sony Interactive Entertainment, 2020.

19 NAUGHTY DOG: *The Last of Us Part II*. [digital game]. San Mateo, CA : Sony Interactive Entertainment, 2020.

20 Remark by the authors: It is based on the 17th-century idea of the cleric and memoirist Cardinal de Retz: „There is nothing in this world that does not have a decisive moment [...] and the masterpiece of good ruling is to know and seize this moment".; See: O'HAGAN, S.: *Cartier-Bresson's Classic Is Back – but His Decisive Moment Has Passed*. Released on 23<sup>rd</sup> December 2014. [online]. [2022-05-20]. Available at: <<https://www.theguardian.com/artanddesign/2014/dec/23/henri-cartier-bresson-the-decisive-moment-reissued-photography>>.

the demarcation line and shapes the difference in whether the shot makes an impression. Pressing the shutter of a camera and firing a gun in a digital game are not so different mechanically, as S. Sontag pointed out, “[t]o photograph people is to rape them by seeing them as they are never seen, to make them into objects that can be symbolically appropriated. Just as the camera is a sublimation of a weapon, to photograph someone is a kind of subliminal murder – a gentle murder, fitting for a sad and frightening time”.<sup>21</sup> According to E. Frankel, visual art editor of Time Out, an artwork’s ability to reflect the human condition comes down to what idea it expresses and how it is expressed, “[i]t doesn’t matter if a work of art is a photo taken in a digital game or an actual turd in a tin can [as in a famous 1961 work by Italian artist Piero Manzoni], what matters is what the work is saying”.<sup>22</sup>

## Intent and Expansion of Photo Mode Development

While the primary component in digital games is the narrative and specific gameplay roles, developers have capitalized on photo modes as a novel way to attract new players. Originally created to allow players to pause the game at any point (sometimes except for so-called cut scenes, short scenes that are not playable but develop the story) and immediately explore the environment, photo modes have evolved. Virtual photography increasingly resembles real-world photography but comes with the huge advantage of being able to visit places one could never visit in real life. As S. Sontag suggests, photography constructs people as tourists in other people’s realities (and in their own realities), and virtual realities are fast becoming as legitimate as the corporeal world as sites of photographic voyeurism. If traditional photography allows us to reify our physical world in this sense, the same process extends to these gamer images.<sup>23</sup> Indeed, in the designed space of the digital game, these images can to some extent, transfer the power to construct reality from the creator of the virtual world to the player, allowing the player to capture and reframe the experience.

In recent years, a proliferation of major digital game releases offering photo modes has led to economic and cultural phenomena. Economically speaking, photo modes have created various new employment opportunities. New positions in a variety of gaming companies and virtual communication companies are easy to find, with positions titles such as Game Capture Artist with an average salary from 70,000 to 100,000 USD. Furthermore, as with many other creative arts, virtual photography is showcased at various museums such as the Fotomuseum Winterthur in Switzerland, beginning in 2016. At that time, artists approached screenshots much as they would in the real world. This led to more experimentation “with photos that would have been impossible to take in real life or that drew attention to the simulated nature of the virtual world (glitches in the graphics, weird geometry, images of places the player wasn’t supposed to see...)”.<sup>24</sup> Today, localized art exhibits showing pieces that span the boundaries between virtuality and reality are

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21 SONTAG, S.: *On Photography*. New York, NY : Rosetta Books LLC, 2005, p. 10.

22 HOBBS, T.: *Are These Stunning Photos of Imaginary Worlds a New Artform?*. Released on 24<sup>th</sup> May 2021. [online]. [2022-06-17]. Available at: <<https://www.bbc.com/culture/article/20210521-are-these-stunning-photos-of-imaginary-worlds-a-new-artform>>.

23 For more information, see: SONTAG, S.: *On Photography*. New York, NY : Rosetta Books LLC, 2005.

24 DASSA, N.: *The Imaginary Worlds of In-Game Photography*. Released on 5<sup>th</sup> January 2022. [online]. [2022-06-18]. Available at: <<https://www.blind-magazine.com/stories/the-imaginary-worlds-of-in-game-photography/>>.

commonplace, as with L. Sang, who has held exhibitions in Spain, London, and Los Angeles. Thus, the photo mode in digital games provides a new art form that resembles real-life photographs in a variety of ways.

Additionally, while digital games have created a strong sense of cultural identity due to the space for people to share their own experiences, learn from each other, and make friends, photo modes have elevated that identity. Nowadays, artistic digital-game photography communities can be found across the internet such as the Instagram community *GamerGram*, which allows players to share their screenshots. There are also numerous dedicated virtual photography hashtags, online magazines, aggregators on social media platforms, as well as apps such as *Captis*. Therefore, the emerging art form has created and enhanced a sense of community globally.

## Promotional Use

Overall, developers are seemingly comfortable with these creative activities of the players, as the resulting images and user-generated content serve to accentuate the visual artistry. It is also free and to some extent an example of viral marketing. From a marketing perspective, the potential of user-generated content benefits almost any field but is especially true in the case of a medium as visually dependent as gaming. Allowing the ability for players to capture moments onscreen through photo mode and share them across their personal channels is a cost-efficient method of promotion. Developers promote the images to receive free exposure to their digital games on social media and the web for a variety of tangible benefits.

One benefit resulting from sharing virtual art is that it can draw consumers in who may not have an interest in gaming but may recognize the creative aspect of photo mode. To this point, Guerrilla Games, Santa Monica Studio, and Sony XDev collaborated with virtual artists to establish the *Annual Virtual Photography Awards* in 2020. A panel of judges consisting of digital game photographers, still photographers, and digital game industry professionals determines winners based on artistic merit, technical ability, and interpretation of the yearly theme. Another example is Sony, which created a “share of the week” where virtual photographers take part in weekly themes in games that correspond to that week’s theme and have the best shots promoted at PlayStation.Blog, as well as on Sony Instagram and Twitter. Other promotional events are executed through individual games. A National contest such as the *Days Gone Photo Mode Contest*, by Bend Studio (a developer for Sony PlayStation), is an example. Other tangible benefits to sharing photos are economic, such as the increased likeliness for players to pay longer and pay for skins or other downloadable content (DLC). Additionally, technical advances are displayed which can be a differential when it comes to pitching future projects.

Photo mode also opens new lines of communication between developers and consumers. As an example, Guerrilla Games, through consumer social media account monitoring, found that fans had noticed a glitch regarding how the protagonist’s hand in *Horizon Zero Dawn*<sup>25</sup> was positioned in a scene. Guerrilla Games fixed the glitch and was able to promote both the fix and the art to their benefit. Based on these examples, the promotional use of virtual art stemming from the use of photo mode in a variety of digital games currently assists developers in their marketing efforts.

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25 GUERRILLA GAMES: *Horizon Zero Dawn*. [digital game]. San Mateo, CA : Sony Interactive Entertainment, 2017.



# Limits

In some cases, the addition of photo mode tools has been curtailed to avoid a potentially negative image because of bad publicity. In *Cyberpunk 2077* a quest within the storyline contains religious aspects and a man is crucified alive. The authors wanted to save the creation of blasphemous memes with the heroine 'V' under the cross but knew it would be controversial. Therefore, the creators blocked the possibility of using photo mode in advance. In the same digital game, after turning on photo mode, no children are near the main character, and players are unable to photograph them. This was done to stop the reappropriation of the material and to avoid a potential backlash regarding negative publicity.

One potential future limitation concerns the idea of copyright. While we have shown that the developers are generally accommodating towards the art stemming from their games, even using it to promote their products because it is economically advantageous, that may change. Copyright is an issue that neither digital game developers nor various courts have strictly determined to date. In the United States, for example, digital game images are copyrighted by the developer. Although the end user controls the digital game and action, the developer owns the images. If the image is transformed into something entirely new, 'fair use' laws may apply. However, if a commercial gain is expected, fair use does not apply. Unlike a photograph, where the picture is of a real object and the new manifestation of it is created through an individual's creativity, virtual photography saves an image that was already rendered by software using proprietary and copyrighted elements. While virtual photographers may argue that the photo is a new creative angle from the digital game content, this argument has not been tested in the courts. The developer Capcom sought to address this in *Resident Evil Village*<sup>26</sup>. While the digital game incorporates photo mode, the virtual photograph is branded with a 'copyright belongs to Capcom' stamp. Currently, many major digital games do add this limitation, but a major studio like Capcom doing this raises the visibility of the potential copyright issue and highlights the key difference between traditional and virtual photography. To conclude, while gaming developers and corporations currently see sharing of the virtual art from photo modes in digital games as a benefit, the issue of copyright may need to be adjudicated in the future.

## Conclusion

Photography modes have made virtual photography an emerging art form. The latest photographic modes mimic real photographs well by incorporating controls that are found in physical cameras and allow recognized techniques when screenshotting in digital games. Such tools provide users with artistic control and creative possibilities. The proliferation of digital games with the photo mode tool has led to cultural and economic phenomena. While developers may have originally intended photo modes as a new way to get players to share screenshots of the digital game on social media (and get it trending) the practice has led to the birth of a truly new art form. Using the aesthetic means of digital technology, this art form has led to the creation of promotional sites that, among other things, serve as a form of participatory marketing of a particular

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26 CAPCOM: *Resident Evil Village*. [digital game]. Osaka : Capcom, 2021.

digital game when communicating in the mass media space, as it shows the visual spirit of the digital game (parallel with other presentations of the digital game, such as trailers). This hobby generates a community with common interests, which in turn creates a background for competitiveness even with rewards in the field of virtual art. It establishes and presents games at an art level; it can turn general public opinion away from reducing digital games to uncreative and useless pastimes. Therefore, this photo mode (as opposed to the camera as part of the game mechanics and story element, which is embedded in the game itself but usually does not represent a pure artistic focus) can serve as one of the tools in the practical teaching of photographic skills (included competitions), but also as a form of media that creates social relations and dialogue. These photo modes lead to screenshots that can convey what the player will see in the game. They allow pictures to fully convey what the player will see in the game providing expectation and excitement for potential players.

Future studies investigating the online communities of virtual art through an anthropological lens may lead to a deeper understanding of the humanistic component of digital games, and virtual art specifically. Additionally, a study linking the sharing of visual art to gameplay could be done to determine if and how much longer digital games with photo mode are played would lend additional information to this trend. Lastly, understating quantitatively the tangible economic benefits of sharing photos relating to DLC could be a future line of research, and provide a deeper picture of the new art form of virtual art.

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