

“Youtubers Are Upscaling The Past To 4K. Historians Want Them To Stop” Article Review

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Modern technological innovation has changed the way people encounter historical photographs and film. On YouTube, creators use artificial intelligence, neural networks, and digital editing software to stabilize old footage, remove scratches, increase resolution, add colour, and create extra frames that make movement appear smoother. Denis Shiryayev became one of the most visible creators in this field through videos that transform early film into 4K, 60-frames-per-second presentations. The article “YouTubers Are Upscaling the Past to 4K. Historians Want Them to Stop,” originally published by *Wired UK*, presents two competing interpretations of this practice. Supporters argue that enhancement makes remote history vivid and accessible to contemporary viewers. Historians and archivists warn that the process invents information and can make a modern adaptation appear to be an authentic historical record. (Nast, “YouTubers Are Upscaling”)

The original essay supports the use of this technology because enhanced footage can attract attention and create a stronger emotional relationship with the past. That position remains persuasive when one important condition is added: the enhanced version should be labeled clearly as an interpretation, and the original should remain available. The debate should not be reduced to whether colour and high resolution are good or bad. Restoration, repair, enhancement, and historical reconstruction perform different functions and introduce different levels of invention. Digital artists can produce valuable educational and artistic adaptations, but they should not present estimated colours, synthesized frames, or reconstructed details as evidence captured by the original camera. (Nast, “YouTubers Are Upscaling”)

The Article’s Central Debate

The *Wired* article begins with the powerful effect of Shiryayev’s videos. Viewers can appear to walk through New York in 1911, ride the Wuppertal suspended railway at the beginning of the twentieth century, or watch some of the earliest surviving moving images with a visual smoothness associated with modern recording. Neural Love, the company connected with Shiryayev, uses several processes rather than one simple filter. The footage may be cleaned, repaired, stabilized, sharpened, upscaled, colourized, and interpolated to a higher frame rate. Each step changes how the viewer experiences the source. (Nast, “YouTubers Are Upscaling”)

Supporters describe the result as a form of time travel. Human movement looks less mechanical when frames are added, while faces and streets become easier to recognize at higher resolution. Colour can

reduce the psychological distance created by black-and-white film for viewers accustomed to modern media. Elizabeth Peck, associated with Neural Love, explained that commenters often feel as though they are present in the historical scene. This reaction is central to the positive argument. An archive that seemed distant or technically difficult may suddenly attract millions of viewers who would never have searched for the original. (Nast, "YouTubers Are Upscaling")

Historians respond that immediacy is not the same as accuracy. The past did contain colour, but the exact colours were not recorded in black-and-white film. A machine-learning model predicts likely colours from patterns learned through other images. The additional frames used to create 60-frame-per-second movement were also never photographed. Upscaling may generate plausible edges, textures, and facial details from limited information. The result may feel realistic while containing data produced in the present. The controversy therefore concerns not only visual quality but the authority viewers give to realistic-looking images. (Nast, "YouTubers Are Upscaling")

How the Technology Works

Artificial-intelligence colourization uses models trained on large collections of images. The software learns associations between visual features and common colours: vegetation may be green, sky may be blue, and skin may fall within learned ranges. When the model receives a grayscale image, it assigns colours according to those patterns. The output is a probability-based estimation rather than recovery of colour information hidden inside the film. Historical research can improve the result by identifying uniforms, signs, vehicles, buildings, and documented materials, but an automatic system cannot know every local and historical variation. (Read and Meyer)

Upscaling increases the apparent resolution of an image. Traditional enlargement can make existing pixels more visible without adding genuine detail. Machine-learning systems instead predict how a higher-resolution version might look based on examples encountered during training. This process can produce clearer faces and objects, but it may also create features that were not present or remove irregularities that were meaningful. A viewer may assume that a sharpened button, eye, or sign was captured by the original camera when it was partly generated by the algorithm. (Read and Meyer)

Frame interpolation creates images between the frames recorded on the original film. Early cameras often used lower or inconsistent frame rates, and projection at an unsuitable modern speed can make movement appear unnaturally fast or jerky. Interpolation estimates intermediate positions so that motion looks smoother. This can improve viewing comfort, but the synthesized frames are interpretations of how a body or object probably moved. Fast motion, occlusion, smoke, and damaged film can cause distortions. Correcting playback speed through historically informed projection is different from generating new moments. (Read and Meyer)

Stabilization and repair may involve less historical invention, although they still require judgment.

Removing dust, scratches, flicker, or accidental camera shake can make the recorded content easier to see. Yet damage and photographic characteristics are also part of the object's history. Archivists commonly preserve a high-quality version of the original and document any restoration choices so that viewers and researchers can distinguish the source from the intervention. (Read and Meyer)

The Positive Effect on Viewers

The original essay argues that enhanced images are more relatable and draw attention to the stories behind them. This is the strongest argument in favour of the practice. Many viewers disengage from early film because low contrast, unstable motion, damage, and unfamiliar speed make the people appear less human or less connected with modern life. Enhancement can reveal ordinary gestures, clothing, street behavior, facial expressions, and urban detail. Once viewers become curious, they may seek more information about the city, event, or individuals shown. (Nast, "YouTubers Are Upscaling")

Emotional accessibility has educational value. Students may understand intellectually that people in 1910 experienced full colour and ordinary motion, yet black-and-white footage can unconsciously place them in a separate world. A carefully labeled colourized adaptation can challenge the belief that historical people were fundamentally different. It can make viewers notice children playing, workers commuting, or pedestrians reacting to a camera. History becomes populated by individuals rather than reduced to dates and official events. (Nast, "YouTubers Are Upscaling")

YouTube also expands access. Archival collections may be difficult to search, presented in specialist interfaces, or known mainly to researchers. A popular enhanced video can introduce the underlying footage to a global audience. Creators frequently include source information and links, allowing interested viewers to locate the original. The enhanced version can therefore function as an entry point rather than a replacement. (Nast, "YouTubers Are Upscaling")

Historians' Objections

Historians object most strongly when enhancement is described as bringing viewers closer to the authentic past. Emily Mark-FitzGerald warns against treating photographs as uncomplicated windows. Every photograph is already shaped by camera technology, framing, exposure, selection, preservation, caption, and later use. AI alteration adds another layer while making the result appear more transparent. The smoother and more realistic the video becomes, the less likely an inexperienced viewer may be to question what was added. (Nast, "YouTubers Are Upscaling"; Read and Meyer)

Colour is a clear example. A model may assign a brown or gray shade to clothing because it is statistically common, while the actual garment may have been bright red or blue. Flags, uniforms, skin tones, painted signs, and ceremonial objects require historical evidence. Automatic colourization

can also reproduce biases from training data. If a system has learned a limited range of skin colours or cultural objects, it may alter people and places according to modern expectations. (Nast, “YouTubers Are Upscaling”; Read and Meyer)

Frame interpolation changes time. Early footage may seem strange partly because it was recorded and projected through technologies unlike those used today. That difference is historically meaningful. Making every film resemble contemporary digital video can erase the history of media itself. A 4K, 60-frame-per-second adaptation does not show exactly what the camera operator produced or what early audiences saw. It shows how a modern system imagines the scene under current visual standards. (Nast, “YouTubers Are Upscaling”; Read and Meyer)

There is also a risk that labels and source information will disappear as videos are downloaded, clipped, reposted, or incorporated into documentaries. An enhanced image may circulate without its disclaimer and eventually be treated as original evidence. Digital media travels faster than archival context. The creator may describe the work honestly, but later users may not preserve that honesty. (Nast, “YouTubers Are Upscaling”; Read and Meyer)

Restoration Versus Enhancement

The original essay correctly emphasizes the difference between restoration and enhancement. Restoration generally aims to stabilize and clarify an object while remaining faithful to surviving evidence. It may repair torn film, correct known projection speed, remove dirt introduced through damage, or balance exposure. Enhancement may add information that is plausible but not recoverable from the source, such as guessed colours, synthesized detail, or interpolated frames. (Read and Meyer)

The boundary is not perfectly clear. Removing a scratch can require reconstructing the image beneath it, and correcting speed may depend on uncertain historical information. Nevertheless, the distinction remains useful because it asks what kind of claim the final work makes. A restored archival master should prioritize evidence, documentation, and reversibility. An enhanced adaptation may prioritize accessibility, beauty, or emotional effect, but it should identify itself as an adaptation. (Read and Meyer)

Neural Love’s acknowledgement that its colourization is not necessarily historically accurate supports this distinction. Shiryaev compares the work to a modern adaptation of Shakespeare or a literary translation. That analogy is appropriate. A stage director may change costume, setting, and rhythm to make an old play meaningful for a current audience, but the production is not confused with the original manuscript. AI-enhanced footage can be valuable under the same principle when viewers are told that they are watching a creative reconstruction. (Read and Meyer)

My Position in Favour of Responsible Enhancement

My position remains in favour of using this technology because the enhanced footage can create interest, attention, and emotional connection. The process does not destroy the original film when the archival source is preserved separately. Viewers can benefit from more than one version: the original as historical evidence, a carefully restored version for clear study, and an enhanced adaptation for public engagement. Prohibiting adaptation would limit creative and educational possibilities without guaranteeing that original footage receives more attention. (Nast, “YouTubers Are Upscaling”)

However, support should not become uncritical enthusiasm. The enhanced video should include a visible opening label, not only a note hidden in the description. The label should identify colourization, upscaling, interpolation, stabilization, sound, and any other changes. The creator should link to the source archive and, where licensing permits, display a comparison with the original. Historical researchers or professional colourists should be consulted when the work claims a high level of accuracy. (Nast, “YouTubers Are Upscaling”)

Creators should avoid language suggesting that AI has discovered the “true colours” or restored lost detail with certainty. Terms such as estimated, interpreted, adapted, or AI-generated are more accurate. When a colour or detail is supported by a uniform record, surviving object, written description, or colour photograph, that evidence can be cited. Uncertain areas should remain acknowledged as uncertain. (Nast, “YouTubers Are Upscaling”)

Educational Use

Teachers can use the controversy itself as a lesson in historical literacy. Students can compare the original and enhanced versions, identify changes, and discuss which features are recorded evidence and which are generated. They can investigate the source, camera technology, location, date, and historical context. Rather than treating the enhanced film as a transparent window, the class can study how every representation mediates the past. (Nast, “YouTubers Are Upscaling”; Prelinger)

This approach develops digital literacy as well as historical knowledge. Contemporary audiences increasingly encounter AI-generated images, synthetic voices, and reconstructed video. Learning to ask who created an image, what information was added, and how provenance can be verified is an essential civic skill. Historical upscaling offers a visually engaging way to practice that skepticism without rejecting creative technology. (Nast, “YouTubers Are Upscaling”; Prelinger)

Ethical Risks Beyond Accuracy

Enhancement becomes especially sensitive when images show victims of war, genocide, colonial violence, racial oppression, or personal trauma. Adding smiles, changing expressions, or beautifying

subjects can violate dignity and alter the meaning of the record. Descendant communities and relevant institutions should be consulted when the material concerns identifiable victims or culturally sensitive events. Public-domain status does not eliminate ethical responsibility. (Nast, “YouTubers Are Upscaling”; Read and Meyer)

Soundtracks can also manipulate interpretation. Early silent footage posted online is often accompanied by music or artificial ambient sound. These additions can create nostalgia, danger, comedy, or sentiment not present in the source. They should be labeled and selected carefully. A cheerful score placed over scenes of poverty or colonial domination can distort the viewer’s response as powerfully as inaccurate colour. (Nast, “YouTubers Are Upscaling”; Read and Meyer)

The Importance of Preserving Originals

The enhanced copy should never become the only accessible version. Archives should preserve high-quality scans of the source, including frame edges, damage, and technical characteristics where relevant. Digital preservation also requires metadata, storage, migration, and documentation. YouTube popularity does not guarantee long-term access; channels can disappear, files can be recompressed, and descriptions can be separated from videos. (Read and Meyer)

Creators benefit from archival labor because institutions and collectors preserved fragile film for decades. Responsible enhancement should acknowledge the archive, respect licensing, and return useful information where possible. Popular attention can support preservation by showing the public why collections matter, but only when the source institution and provenance remain visible. (Read and Meyer)

Conclusion

The article “YouTubers Are Upscaling the Past to 4K. Historians Want Them to Stop” presents a real conflict between accessibility and authenticity. AI enhancement can clean, stabilize, colourize, smooth, and enlarge historical footage in ways that make viewers feel emotionally close to the people shown. This experience can attract audiences, support education, and encourage further interest in history. The original essay is therefore justified in defending the technology’s ability to make the past more relatable. (Nast, “YouTubers Are Upscaling”; Read and Meyer; Prelinger)

Historians are also justified in warning that the process adds information. Colours are estimated, frames are synthesized, and details are predicted. The result is not simply the original film made clearer; it is an adaptation shaped by modern software and taste. Realism can make invention difficult to detect, especially when context disappears through online sharing. (Nast, “YouTubers Are Upscaling”; Read and Meyer; Prelinger)

The best solution is not to stop enhancement but to practice it responsibly. Original footage should be

preserved and linked, changes should be labeled prominently, historical evidence should guide claims, and uncertain elements should remain acknowledged. Used in this way, AI-enhanced historical film can create a strong connection between present and past without pretending that adaptation is the same as archival truth. (Nast, “YouTubers Are Upscaling”; Read and Meyer; Prelinger)

Works Cited

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