Un-Stereotyping Nuclear Weapons?
Analysis for Lex International

Backgrounds, Arguments, Examples

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Introduction

The discourse on nuclear weapons is biased. Public debates often omit crucial aspects and struggle to contextualize the political and industrial interests behind the nuclear field. In stories about the issue, audiences encounter the same themes and images over and over. These end up triggering feelings of powerlessness and disinterest in many individuals. The distance established between the audiences and nuclear weaponry has implications for the engagement of citizens in respective policy-making.

The dominant deterrence narrative is reinforced by many media outlets. While the corresponding stereotypes around nuclear weapons have already been deeply ingrained in the minds of the audiences, an influential lobby advocates for sustaining a biased discourse. Ethical journalistic practice involves showing the whole picture instead: from the real dangers of nuclear war to those affected by nuclear industries, to those who benefit from dominant policies and debates.

The selection of images is crucial in this respect. Images used for visualizing nuclear debates can either contribute to the democratization of the issue or keep the focus narrow by only focusing on stereotypical aspects rarely challenged by the public. According to empirical research, audiences tend to "believe what they see rather than what they read or hear (...), when visual and verbal messages are in conflict, viewers have difficulty remembering the verbal information (...) and (...) visual messages override other messages when processed simultaneously" (Schill 2012: 118). Overall, images "serve as arguments, have an agenda setting function, dramatize policy, aid in emotional appeals, (...) create identification, connect to societal symbols, transport the audience, and add ambiguity" (ibid.). Focusing on selecting appropriate imagery for visualizing stories on nuclear weapons is therefore crucial for contributing to a public understanding of the issue and incentivizing democratic deliberation.

This report is a tool for journalists and (visual) storytellers and should help with the search for imagery beyond the dominant narrative. Non-stereotypical 'nuclear images' offer agency, foster empathy through information, and showcase the diverse problems affecting nearly all people on Earth. They visualize potential solutions for a world where security and stability can be achieved without nuclear weapons. Therefore, this report formulates actionable strategies for addressing potentially problematic stereotypical depictions of nuclear weapons.

Current nuclear dynamics

After decades of living with a nuclear threat, the production of nuclear weapons and the advocacy of movements protesting them, where do we stand?

Sustained relevance of the nuclear issue:

Current geopolitics suggests a potential "nuclear renaissance," with discussions about nuclear weapons in space and the prospect of more or different nuclear weapons in Europe. There are debates of "new Cold War" in a precarious geopolitical situation that amplifies nuclear risks and shifts (European) attitudes toward nuclear weapons against the prospect of Russia's war in the Ukraine.

False beliefs, limited knowledge:

The belief in the power of the bomb persists. The ideology of nuclear deterrence seems entrenched in the public consciousness. People outside of the field have a limited knowledge about who actually possesses nuclear weapons, where they are located, what they might be targeting and who contributes to the issue with which interest. Audiences are repeatedly presented with selective storytelling focused on high-level discourse, which perpetuates a seeming distance between the topic and people’s lives. At the same time, the vast number of people affected by the nuclear field in both the past and the present remains invisible.

Invisible alternatives and achievements:

Furthermore, the public is rarely presented with viable solutions and strategies. There is no single solution that lay people believe could credibly address the problem. Achieving a world without nuclear weapons is often viewed as impossible. While there have been significant achievements in recent years, such as the Treaty on the Prohibition of Nuclear Weapons (TPNW), they often remain unnoticed by the ‘ordinary’ population.

Hopelessness and passivity:

Overall, this leaves many feeling hopeless and devoid of agency. The presence of nuclear weapons is unquestioned and seems permanent, which leads to apathy and a belief that efforts to eliminate them are futile. The abstract nature of the issue and its overwhelming scope contribute to feelings of disempowerment and may exacerbate compassion fatigue or crisis fatigue, particularly when faced with

seemingly more immediate concerns like current conflicts or climate change. That the danger of a nuclear catastrophe appears to be theoretical reinforces subjective distancing from the issue.

Reframing the nuclear:

In the course of the 1990s, the nuclear industry and its supporters introduced a number of phrases into the discourse ('nuclear renaissance' or 'nuclear renewal') in order to strengthen the image of nuclear power as a safe source of sustainable energy. With the Fukushima accident of 2011, this argumentation has become increasingly contested again. In order to counter lobbyist pressure, media should focus on on-going challenges and contestation, such as "the economics of nuclear power, the intractable problems posed by long-lived and pernicious nuclear wastes, and links between nuclear power and nuclear weapons proliferation" (Kinsella et al. 2015: 279). Furthermore, nuclear issues need to be further democratized, challenging "who gets to speak regarding nuclear topics, in what settings, under what conditions, and with what outcomes" (ibid.).

Broadening the visual narrative with imagery that humanizes the field and allows audiences to grasp its implications is part and parcel of pursuing journalistic virtues of impartiality, independence, and objectivity. Challenging dominant nuclear values corresponds with a journalistic ethos and professionalism. This report discusses relevant backgrounds and offers a number of strategies to expand visual discourses around nuclear weapons.

Media, images, and the nuclear field

Emotions and attitudes related to nuclear warfare are closely related to the images media audiences are confronted with. Images have **framing effects** that impact **public support for policies** and thus may strengthen or diminish public pressure (Powell et al. 2015). Media thus have a responsibility in creating a balanced, nuanced narrative.

Moreover, the **media** have been **complicit** in establishing or supporting the biased discourse on nuclear power and warfare in several ways. They have **constructed nuclear weapons** as "mythological wonders and victimless spectacles occurring in 'uninhabited' areas and presented them as necessary beyond doubt" (Taylor 2003: 8). This has contributed to pushing the nuclear issue and weapons development **outside democratic debate** (ibid.). Moreover, some **media corporations have profited** from nuclear-corporate contractors (for example, General Electric, involved in the production of nuclear weapons, owned NBC in the United States). Popular culture further helped **trivialize the nuclear bomb** as if it was merely a technical device without any moral implications - and thus not worthy of protest (ibid.: 13).

The main feature of **visuals** in nuclear imagery deployed in media is that with the exception of a small number of (male) state leaders, they **lack humans**. This bias has been implanted from the very beginnings: for example, images of victims of the atomic bombings in Japan have been censored and classified by the US forces during the cold war (Taylor 1997: 570).

The biased discourse constructs nuclear weapons through a number of **dominant themes** (Kinsella 2005):

a) Mystery:
   The scientific development of the nuclear weapon and the underlying technology are (made) inaccessible to the lay public. Nuclear debates are thus isolated from public discourse, which impedes public participation in decision making around related policy issues.
b) Potency:
   Nuclear weapons have been portrayed as omnipotent, nuclear war as the threat able to destroy planet earth. This prevents other, already existing nuclear threats, such as contamination of production sites or waste disposal and their social and environmental effects, from entering into public consciousness.

c) Secrecy:
Political and diplomatic debates as well as decision-making around nuclear weapons or the nuclear industry are taking place in forums secluded from the public. The latter are confronted with recurring references to the threat of nuclear war without appropriate insight into nuclear realities. This again limits public knowledge, simultaneously justifying public exclusion from decision-making.

All of these features of the nuclear discourse are supported with **selective imagery** that plays a crucial role in **distancing the public** from the issue and nourishing feelings of helplessness or indifference: images that show missiles but not those killed by them, politicians but not workers, power but not destruction. The images usually selected to visualize 'nuclear stories' help sustain these themes and the biased discourse, since they only show a small part of the whole picture.

Patterns of nuclear visual communication

The visual representations of nuclear weapons and the nuclear field predominantly features **mushroom clouds** or **missile tests** as default thumbnails. Military planes and missiles are showcased as symbols of **strength**, but **rarely as potential threats**, especially to the viewer. Moreover, missiles are consistently shown pointing upwards, reinforcing a sense of potential threat and power. Audiences see these bombs as almost aesthetic instruments of power.

Moreover, these are symbolic representations, suggesting that an atomic blast concludes matters, serving as a **last resort**. However, history proves that the use of atomic bombs marks the **beginning of immense suffering** and hardship, regardless of where in the world they fall. Images depicting the specific effects of atomic bombs on concrete humans and in concrete situations are rarely published. If at all, black and white images from Hiroshima and Nagasaki suggest that nuclear weapons are an outdated issue.

However: contemporary nuclear weapons would not end the world immediately. On the contrary, if deployed today, they would create even greater devastation than we know from history. The confrontation with the **human toll and potential consequences** of nuclear attacks allow audiences to establish a connection and realize the real amount of horror behind the nuclear threat.

As **political instruments**, nuclear weapons are associated with **powerful statesmen**. They are often portrayed as **necessary** for deterrence. While (the leaders of) certain countries are portrayed as responsible actors,

using nuclear weapons solely for defense or deterrence purposes (for example, the USA and France), others are seen as engaging in offensive and irresponsible actions (such as Russia and North Korea). However, this self-portrayal as ‘good’ is employed by all sides.

Nuclear narratives emphasize how crucial atomic bombs are for (inter-)national **security** (for instance, Russia would refrain from using atomic bombs in Ukraine out of fear of a response from other nuclear powers). However, these threats neither prevent war (Russia still invaded Ukraine) nor do they actually lead to action (Russia threatens to use nuclear warfare but refrains from doing so) - an aspect that is hardly ever addressed.

At the same time, modern nuclear disarmament activists — who repeatedly highlight such facts — are typically depicted as small, ineffectual groups or as 'older generations' with outdated concerns. This does not do justice to their activities or their expertise but serves to marginalize their voices and uphold dominant interests in the field.

The missing elements: people, profit, solutions

When audiences are mostly confronted with a uniform picture that helps a few dominant actors, certain aspects of the nuclear field remain perpetually **invisibilized**. Most importantly: In (visual) communication about nuclear weapons, there are **hardly any people** depicted in the images - a cynical feature of the narrative, considering that the consequences of nuclear weapons will primarily result in mass deaths of humans and nature.

The large numbers of people who contribute to the **production of nuclear weapons** are equally hidden from the view of the public, just as are those people involved in numerous (international) **organizations**, private **companies**, **lobbies**, and **NGOs**, advocating for or against them. We argue that this is no coincidence, but rather the result of decades of **misrepresentation**.

Missing are also images from **contemporary testing sites** and visual evidence documenting the **consequences** for local and global populations and the environment. While the public regularly hears about nuclear threats, public knowledge remains scarce about how nuclear weapons, their **production**, **storage**, **transportation**, and ultimately their **use**, pose a danger to people and the environment. Audiences are barely aware that there are 12.000 nuclear weapons globally, which have effects in the present day - and not merely in some unforeseeable future.

Despite nuclear weapons being designed to destroy cities, there are hardly any images depicting affected **cities** (with the exception of Hiroshima). The **targets** of existing nuclear arms are never visualized. Similarly, there are very few images available of first responders (hospital workers, firefighters, etc.).

Few images exist that illustrate the intense secrecy surrounding nuclear weapons policy. There is also a significant gap in public understanding regarding the **nuclear weapon industry's production and profits**. Rarely depicted are those individuals outside the military who are involved in all aspects of nuclear weapons production, from nuclear labs, companies, universities, financing, budget allocations, etc. Investigative journalism into companies producing nuclear weapons is crucial, especially as nuclear-armed states become even less transparent about their arsenals. Visual documentation can aid investigation and illustrate this issue. Additionally, there is limited coverage on the sources of uranium used to produce and maintain nuclear warheads, despite the likelihood of **unethical practices** within the industry.

Additionally, high-level **politicians** and **diplomats** are rarely publicly questioned about their plans for solving the problem, eliminating nuclear weapons, preventing their use, or averting accidents. Politicians are seldomly **held accountable** for (not) addressing these critical issues.

Civil society, including organizations like ICAN, rarely appears in mainstream reporting. At times, the media relies on black-and-white photos from protests in the 1970s rather than images of today's nuclear disarmament movement. **Diplomatic efforts** or solutions, especially related to the Treaty on the Prohibition of Nuclear Weapons (TPNW), are rarely visualized. There is thus an overall shortage of images showing **people working for nuclear disarmament**. Audiences are yet to recognize the **diversity** of individuals working to solve the issue (in terms of age, nationality, race, gender, field of work, etc.).

Providing audiences with respective background stories and insightful visuals is the basis for informed opinion forming and part of the journalistic duty. Highlighting the **experiences** of **ordinary people** around the world and the **efforts and achievements** of **advocates** for a nuclear-free future allows viewers and readers to establish an emotional connection to the issue and opens up spaces for **democratic deliberation**.

Biased narratives sustain inequality

There are powerful mechanisms of ideology and lobbying at play: Influential individuals and states endorse nuclear weapons, fostering

silence and intimidation for dissenters. Think tanks and experts – regularly funded by the weapon industry – or nuclear-armed states are regarded as authoritative, while critics of nuclear weapons are labeled as biased activists.

Even media outlets that critically engage with nuclear issues often receive substantial **advertising** from nuclear weapons producers. Journalists may position themselves as 'critical thinkers' when questioning the Treaty on the Prohibition of Nuclear Weapons (TPNW) and advocating for multilateral solutions, but they seldom **challenge the concept of deterrence**.

Those who **benefit** from this narrative **politically** or **monetarily** have an interest in keeping the individual observer in a state of fear, powerlessness, and alienation. The belief that nuclear weapons protect us, that we can effectively use them as a deterrence strategy or a tool of defense, prevents us from connecting with people and their destinies, and from imagining a world without these weapons. Accepting nuclear weapons is cynically considered 'realistic', whereas questioning their existence is viewed as naive.

This one-sided portrayal, which serves specific interests, can be mitigated with **journalistic balance**: inviting diverse voices, providing necessary background explanation, challenging dominant narratives. All of these approaches can be accompanied by appropriate visuals.

Making the effects visible

To overcome the widespread collective paralysis and powerlessness around nuclear weaponry, we propose various strategies to support individuals and movements in looking for and using alternative, additional imagery.

Promoting public agency involves making all efforts and movements against nuclear weapons more visible, portraying them as the experts they are, and celebrating their successes they actually have. Those advocating for disarmament and change consider nuclear weapons both illegitimate and illegal based on evidence and legal standards.

Although much communication is problem-oriented, breaking it down to the **specific stories and effects on those affected and potential effects on civil society** allows audiences to engage emotionally and politically. Engaging with the very concrete consequences of the bombs (e.g. in Hiroshima) in a deliberate, careful and conscious manner allows a conversation to take place on how to avoid the repetition of such destruction, cruelty, and suffering.

An additional focus should be on **highlighting solutions**. What does a world without nuclear weapons actually look like? How can the need for security and stability be met without the nuclear logic? What could a roadmap away from nuclear weapons look like? Visualizing solutions and futures requires further deliberation.

Media can help shape these images by showing more of the reality: there is more to 'nukes' than the bomb or the mushroom cloud. Additionally, journalistic values such as accountability and integrity suggest shedding light on decision-makers such as states and powerful beneficiaries of the prevailing narrative, holding them accountable.

Busting Nuclear Myths

Dominant narratives around nuclear weapons draw upon and simultaneously perpetuate a number of myths that have developed since the development of the atomic bomb. The following overview provides a description of a number of central myths circulating in public debates, often insinuated by high-level politicians, picked up in media outlets or used by lay public to make sense of reporting around the nuclear threats. These myths are accompanied with visuals that perpetuate them. In the following, each myth is shortly contextualized and supplemented with suggestions for visual evidence that can be used in reporting.

The myths revolve around four themes: 1) the notion of nuclear weapons being far away from ordinary people's lived realities, 2) the distinction between 'good' and 'bad' nuclear weapons, 3) the conviction that nuclear weapons are a form of necessary evil, and 4) the framing of protest as futile and outdated.

The ultimate weapon somewhere far away

Myth 1: "The danger does not concern the ordinary person."

What's the assumption?	The threat of nuclear weapons is abstract and distant, something that doesn't impact daily life.
How is it perpetuated through imagery?	Maps, flags, and abstract graphics make the issue seem less human and more like a strategic game.
What's the reality?	The production, storage, and potential use of nuclear weapons have immediate and tangible effects on people and the environment.
Which visual evidence can we include?	Communities living near nuclear facilities, workers in nuclear material production and disposal, environmental consequences of nuclear testing.

Myth 2: "The mushroom cloud is the ultimate end."

What's the assumption?	The explosion of a nuclear bomb marks the end, a conclusive and decisive moment of power and destruction.
How is it perpetuated through imagery?	Images of mushroom clouds from atomic bomb tests or missile launches dominate media representations. These visuals are used as default

	thumbnails for articles, reinforcing the perception of nuclear explosions as the only end point.
What's the reality?	The use of atomic bombs marks the beginning of immense suffering and long-term devastation, not an end. The true impact includes severe environmental damage, long-lasting health issues, and profound social disruption.
Which visual evidence can we include?	Photos of Hiroshima and Nagasaki aftermaths, showing destroyed cities, injured survivors, and long-term health effects like radiation sickness.

Myth 3: "Nuclear weapons are just 'out there'."

What's the assumption?	Nuclear weapons come out of nowhere and are a 'normal' part of the world.
How is it perpetuated through imagery?	Images of fully assembled nuclear weapons and anti-ballistic missile systems. There is a lack of visual representation of the production, storage, and transportation processes of nuclear weapons. The industry remains in the background, overshadowed by the more dramatic images of missiles and explosions.
What's the reality?	The nuclear weapons industry is a significant and often unexamined part of the global economy, involving numerous people, resources, and environmental impacts. The processes and industries behind nuclear weapons are largely invisible, suggesting they are not important to the public discourse.
Which visual evidence can we include?	Images of nuclear facilities, transportation routes, workers, protests against these industries, environmental damage they cause. Images depicting stations of the development and production process (uranium mining and milling operations, conversion and enrichment facilities, reactor sites and reprocessing plants, laboratories and assembly lines, (historical) testing sites, storage facilities and delivery systems - and the workers involved). Demanding accountability from those who profit and are in charge within the industry can also be accompanied with according images.

Good nukes and bad nukes

Myth 4: "Nuclear weapons make us powerful and the world safe."

What's the assumption?	Possessing nuclear weapons is a heroic act of safeguarding the nation, a necessary evil for greater good. Nuclear weapons are essential for national defense and act as a necessary deterrent to prevent wars.
How is it perpetuated through imagery?	Missiles are often shown in a static, upward-pointing position, symbolizing readiness and protection. Military parades displaying nuclear-capable missiles emphasize their role in national security. Leaders are often depicted as stoic and wise, making tough decisions to maintain nuclear arsenals for the sake of national and global security.
What's the reality?	Nuclear weapons do not prevent wars; they pose a constant threat of catastrophic consequences. The idea of deterrence is flawed, as evidenced by ongoing conflicts and the continued risk of accidental launches or escalations. It also ignores the ethical implications and the immense human and environmental costs associated with maintaining and potentially using nuclear weapons.
Which visual evidence can we include?	Visuals of environmental and human impacts of nuclear weapons testing, such as in the Marshall Islands; images of ongoing conflicts like in Ukraine; documentation of the impacts of nuclear policies on local populations across different countries; stories of nuclear disaster survivors, victims of radiation; ethical debates among scientists and global peace movements; images of international protests and disarmament movements.

Myth 5: "Only a few chosen ones should own nuclear weapons."

What's the assumption?	Certain countries, such as the USA and France, are responsible nuclear powers, using their arsenals solely for deterrence, while others like Russia and North Korea are portrayed as reckless.
How is it perpetuated through imagery?	Images often show leaders of 'responsible' countries in diplomatic settings, reinforcing their

	image as prudent custodians of nuclear weapons. Conversely, depictions of leaders from 'irresponsible' nations are more militaristic and threatening.
What's the reality?	All nuclear-armed states engage in similar practices of deterrence and power projection, and the distinction between 'responsible' and 'irresponsible' is largely a matter of perception and political narrative.
Which visual evidence can we include?	Images from international disarmament movements, such as those led by ICAN; documentation of the impacts of nuclear policies on local populations across different countries.

The necessary evil

Myth 6: "Nuclear deterrence is the basis for global security."

What's the assumption?	Deterrence is effective in maintaining international security and preventing nuclear war.
How is it perpetuated through imagery?	Graphics and statements from leaders and military officials often depict nuclear weapons as crucial to global stability, showing strategic maps and missile defense systems.
What's the reality?	Deterrence does not guarantee security. It creates a precarious balance that could lead to accidental or intentional nuclear war. The constant threat does not equate to safety but to a perpetual state of tension.
Which visual evidence can we include?	Historical examples such as the Cuban Missile Crisis and current threats like the tensions in the Korean Peninsula.

Myth 7: "Nuclear weapons are precise."

What's the assumption?	Nuclear weapons can be controlled and their use can be limited to strategic, targeted destruction without widespread harm.
How is it perpetuated through imagery?	Military briefings and strategic maps often depict nuclear strikes as precise and controlled,

	minimizing the perceived impact on civilian populations and the environment.
What's the reality?	The destructive power of nuclear weapons is uncontrollable, leading to widespread devastation, long-term environmental harm, and massive civilian casualties.
Which visual evidence can we include?	Images and stories from Hiroshima and Nagasaki, Chernobyl, and Fukushima; showing environmental, infrastructural, social damage and destruction. Photos that show the physical effects on human beings might be used if appropriate (birth defects, cancer patients, etc.).

Myth 8: Unquestionable and necessary power

What's the assumption?	Nuclear weapons are the ultimate symbol of power and prestige, and their possession is necessary for international status.
How is it perpetuated through imagery?	Images of military parades, political leaders with nuclear backgrounds, and nuclear arsenals emphasize the power and prestige associated with nuclear weapons.
What's the reality?	Nuclear weapons are a source of immense danger and ethical controversy, and their prestige is built on the potential for mass destruction and already existing human suffering.
Which visual evidence can we include?	Visuals of the humanitarian impact of nuclear weapons, stories of scientists and political leaders who have advocated for disarmament, global movements against nuclear proliferation, stories of disarmament advocacy.

The anachronism of opposition

Myth 9: "Activism makes no sense."

What's the assumption?	Modern nuclear disarmament activists are small, ineffectual groups or as outdated relics of the past.
How is it perpetuated through imagery?	Media often uses black-and-white photos of past protests, suggesting that the movement is

	antiquated and not relevant to contemporary issues.
What's the reality?	The disarmament movement is active and diverse, involving people of all ages and backgrounds, and has achieved significant milestones, such as the Treaty on the Prohibition of Nuclear Weapons.
Which visual evidence can we include?	Vibrant and attractive images of recent protests, the awarding of the Nobel Peace Prize to ICAN, recurring international events celebrating International Day for the Total Elimination of Nuclear Weapons, local events and peace memorial services.

Myth 10: "There is a silent consensus for nuclear weapons."

What's the assumption?	There is a general consensus among experts and media that nuclear weapons are a necessary evil, and questioning this is naive.
How is it perpetuated through imagery?	Think tanks and experts funded by the nuclear industry are frequently portrayed as authoritative voices, while critics are marginalized. Media coverage favors the narrative of deterrence and stability.
What's the reality?	There is significant opposition to nuclear weapons, including from scientists, former military officials, and international organizations advocating for disarmament. The consensus is not as uniform as presented.
Which visual evidence can we include?	Visuals of diverse experts and activists speaking at local and international conferences and forums, disarmament negotiations leading to treaties, grassroots movements, transnational activist networks and events.

Myth 11: "Concerns about nuclear weapons are outdated."

What's the assumption?	Concerns about nuclear weapons are outdated, relics of the Cold War era, and not relevant to modern security issues.

How is it perpetuated through imagery?	Old black-and-white photos of Hiroshima, mushroom clouds, and Cold War-era protests suggest that nuclear issues belong to the past.
What's the reality?	Nuclear weapons remain a pressing issue, with modern advancements in technology and ongoing international tensions making the threat as relevant as ever.
Which visual evidence can we include?	Contemporary images of nuclear arsenals, recent tests, modern protests, infographics on currently active warheads. All of the images mentioned above.

Broadening the picture

Showing the problem

What do we usually see?

- A few of the 'big names' (scientists, politicians)
- The end result (an assembled nuclear bomb)

What remains hidden?

- Basically anyone else involved in the processes: workers, miners, researchers, assistants, cleaners, testers, etc.
- The reason why different people are involved, possibly stemming from idealism or political conviction to job dependency due to socio-economic inequalities
- Backgrounds of the history of nuclear weapons
- Other stages of the process, how the process *actually* works

Possible strategies

Increasing public awareness through information
Make the public aware of the relevance of the issue (increasing 'issue salience') by providing information, backgrounds, showing and explaining interdependencies - and visualizing them with attractive, unusual imagery.

Showing the whole production cycle
Consider showing images that depict people involved in all parts of the (background) processes: the design, development, testing, and construction of nuclear weapons, manufacturing of components, planning their use, extracting the materials necessary, in waste disposal, research of biological/social effects, etc.

Naming the bias
Name the dominant frame in order to counter it: e.g., nuclear weapons (and people who control their use) are not 'cool', 'prestigious', 'masculine' - relying on them and advocating for them is irrational (based on unvalidated assumptions such as deterrence), ignorant and negligent (it poses a danger for the whole world and denies the effects the processes already have on communities), and lazy (instead of looking for alternatives, 'the button' is the ultimate answer).

Telling unknown stories from the past

Examples of relevant and interesting stories:

- Stories of scientists involved in the development of the atomic bomb who changed their mind about the bomb after realizing its effects and potential.
- Stories of those invisibilized in history telling (and how governments and organizations treated them and interacted with them), for example:
    - the 130'000 people who were involved in the Manhattan Project without knowing what they were contributing to;
    - the Native populations displaced for building the infrastructure;
    - political prisoners and forced laborers who in the 1950s mined uranium in Czechoslovakia for Soviet nuclear interests - and becoming ill in the aftermath;
    - atomic veterans (from the US, France, Australia, China) forced to observe nuclear weapons testing - and becoming ill in the aftermath;
    - female radium dial painters who painted watch dials with self-luminous paint consisting of radium who were instructed to lick their brushes - becoming ill in the aftermath...
- Stories of specific actors that shed light on historical complexities, such as the Atomic Bomb Casualty Commission established by Truman in 1946, which was distrusted by survivors and in Japan in general, only studied (!) the victims but refused to treat them.
- Historical Myth-busting:
    - Japan didn't capitulate because of the bombings of Hiroshima and Nagasaki.
      Possible imagery: institutions, organizations, initiatives by and from Japanese hibakusha (survivors), scientists and researchers, communities; monuments, museums, peace memorials, etc.
    - The dangers of Uranium extraction and processing were known (and documented) to scientists and politicians since the 1920s.
      Possible imagery: miners and their families, current communities at the sites of closed mines, workers in current mines and their lives and working conditions, etc.
    - Nuclear testing conducted during the Cold war had significant environmental, health and social consequences still relevant today. Possible imagery: communities impacted,

organizations working in the context of health, social support, advocacy, etc.

Possible effects of alternative imagery

Including people in a story makes every issue less abstract and allows viewers to establish a connection. It humanizes the relevance of an issue and makes it relatable. People involved in the processes around nuclear weapons have stories as well - including their own ethical struggles and contradictions, moments of change, different convictions and reasons for being involved in or impacted by the field. Including - and visualizing - these stories, makes the issue of nuclear warfare overall less abstract and technical. Nuclear weapons are not natural - they are not 'just there'.

Depicting the diverse people involved in nuclear processes also emphasizes the collective effort needed to address these issues. This challenges the perception of nuclear weapons as abstract entities controlled only by a powerful elite and highlights the role of ordinary individuals in shaping outcomes. Helping viewers understand the backgrounds - and that these are the result of human activity - deepens their understanding of the issue and increases their agency.

Showing the impacts

What do we usually see?

- The mushroom cloud, destroyed cities, testing sites.
- Military personnel, politicians, scientists.
- Sometimes: survivors (from Hiroshima & Nagasaki, from nuclear accidents).
- Other times (in popular culture): stylised aestheticized sterilized stories of horror scenarios or biased, selective representations of past events.
- Rarely: images depicting environmental (and/or social) impacts (such as imagery from the radioactive wasteland in Chernobyl and people still/again living in the area).

What remains hidden?

- Images of the effective aftermath of Hiroshima and Nagasaki (see "The Journey" by Peter Watkins).
- The long-term consequences of nuclear testing and production.
- The psychological effect of living under the threat of nuclear conflict.
- The geopolitical, economical, social, and cultural contexts and consequences of (the threat of) nuclear attacks.

Possible strategies

Avoiding glorification, while humanizing the impact
Highly aesthetic imagery of nuclear missiles contributes to the glorification of violence, war, and destruction. Selecting images that visualize the devastating impact (such as historical images from Japan) on people, the environment as well as infrastructure and whole societies. Confronting audiences with archival images of the aftermath of the Hiroshima and Nagasaki bombings broadens their perspective, since many people have never seen those details before. Additionally, images of people affected might stress both their suffering and their subsequent activism in a balanced manner.

Explaining global interdependencies
Stories can illustrate the global reach of nuclear fallout and the interconnectedness of nations in the face of nuclear threats.
Possible images: visuals from existing transnational effects, such as communities affected by reindeer death in Sweden or contaminated sheep

on sheep farms in Northern England and Wales after the Chernobyl disaster in 1986.

Questioning those who profit

Stigmatization does not really work for objects. Therefore, stigmatizing nuclear weapons entails focusing on the public accountability of actors involved. Foregrounding a public accountability framing guides the audiences to understand dynamics of profit and dominance, which involves profit making companies as well as governments and other actors.

Showing impacts of the nuclear field on people

For this aspect, you might rely on a social justice frame and a humanitarian frame. Such frames foreground the detrimental effects of the nuclear field on efforts towards social justice and highlight how the field actually perpetuates existing inequalities while creating new ones.

The rationale behind is to build on the current momentum of social justice issues and narratives globally; not only nuclear war but also current production and testing and waste disposal in the nuclear field contribute to injustice in societies and worldwide.

Framing around justice brings communities into focus. Often, it is marginalized communities (globally, regionally, nationally) that bear the worst effects of development, testing, production, etc. (health impacts, environmental impacts), i.e. there is an unequal distribution of nuclear risks and burdens (incl. communities living near nuclear facilities, indigenous peoples affected by nuclear testing and waste disposal, facing eviction, countries facing the threat of nuclear conflict). Additional aspects might be activism and resistance from communities affected and background insights on (exclusion from) decision making processes.

Showing impacts of the nuclear field on people

Similarly, you can rely on the increased awareness of environmental questions by depicting the environmental impact of nuclear contamination and damage caused by nuclear tests and accidents. For example, images of affected areas and unaffected natural landscape can illustrate environmental degradation.

Additionally, this environmental frame might be connected with the social justice or humanitarian frames by highlighting the environmental and social costs at the same time.

Contextualizing former nuclear disasters and accidents

Tell and visualize the stories of survivors, their peace initiatives and protests, cultural impact (such as 'nuclear art'). Consider adding context by including societal, diplomatic, and geopolitical consequences.

Examples include:

- Communities impacted by nuclear testing
    - e.g. the example of Marshall Islands, where inhabitants were consciously exposed to radiation and organized to protest;
    - Native populations in Canada affected by fallout radiation from bomb tests;
    - the example of the caribou, which is particularly susceptible to concentrating radiation due to the short food chain, people eat it; etc.
- Communities impacted by nuclear waste disposal
- Environmental impacts and how communities deal with them
    - Describe and contextualize past mistakes and their ongoing impact, e.g. environmental and societal impacts of past mistakes in handling nuclear waste (such as throwing barrels in the ocean or leaks into groundwater in the US)

Making people understand the actual effects of nuclear war

The explosion is not 'the end', it is actually the beginning - of suffering, destruction and disruption. Nuclear war would have a global impact, everyone would be concerned. The issue is not a local or regional issue, and while it is usually reduced to the 'potential impact of war/attacks', the existing impact is already there. You might use this aspect as a hook to establish a link with existing impacts. By showing what would actually happen in the case of a nuclear attack (based on historical imagery and/or computer-generated images), audiences can develop an understanding of the fact that the nuclear threat is relevant for everyone.

Possible effects of alternative imagery:

Looking, recognizing, and acknowledging specific facts (e.g., from images) allows for broadening societal dialogue. The pathway of information, questioning, and discussion helps to dismantle the deterrence narrative.

Acknowledging the actual effects of the nuclear industry and past nuclear disasters and attacks allows audiences to question several biases ingrained in the nuclear discourse: first, the assumption of nuclear effects being merely local and second, the fetishisation of nuclear weapons through overly aesthetic depictions, which frame nuclear weapons as cool and glamorous objects of desire.

Looking at the unbearable destruction and force of the bomb (beyond the aerial shots of Hiroshima and Nagasaki) creates space for discussion as well as for democratic engagement. A nuclear explosion is neither the end nor the beginning. The effects of nuclear warfare are already there and will continue long after.

Alternative imagery and stories extending the narrative make evident that nuclear weapons constitute a genuine risk of accidental launching and nuclear war, rather than unifying the world in peace as a default position. This lays the groundwork for solidarity and participation. The dangers posed by atomic bombs affect everyone.

Showing the solutions

What do we usually see?

- Official bodies (UN) in the context of treaties such as the TPNW
- Selected public figures in the context of events
- Selected anti-nuclear activists in international fora during events (such as the awarding of the Nobel Peace Prize for ICAN)
- Images from anti-nuclear protests: historical and current
- Symbolic imagery and icons

What remains hidden?

- Related to political developments: what happens in the background (preparatory meetings, negotiations, advocacy work in diverse fora, spaces, regions)
- The actual diversity of the anti-nuclear movement

Dominant imagery and discourse narrows public knowledge on disarmament efforts, the anti-nuclear movement, overall solutions to the nuclear problem as well as possibilities of a future beyond the nuclear paradigm.

Possible strategies

Solution-oriented framing:
Consider selecting images that visualize the negotiation and debates on past and present approaches towards the problem, such as disarmament advocacy by different actors/communities, diplomatic debates and negotiations, initiatives, impacts of the Ban Treaty, as well as examples of local impacts of disarmament.
You might include stories about activists and focus on how/why citizens and communities are actually encouraged to become active through advocacy campaigns, petitions, protests, etc.
Images showing the dismantling/destruction of nuclear warheads and actions taken to reduce nuclear arsenals visualize disarmament.

Asset framing:
How do communities cope with the challenges they are confronted with? How do they deal with the detrimental impacts (of any aspect of the nuclear field) on their daily lives? Stories in this context might be visualized by images depicting both the daily life of people from

communities as well as examples of their deliberate actions in the nuclear context.

Re-framing the anti-nuclear movement:
The anti-nuclear movement has been framed as insignificant, often belittled and ridiculed. In order to do justice to the efforts of organizations and individuals working around the globe, the expertise, the diversity, the action and efficacy of diverse actors in the movement can be showcased.

- Depicting the joy in working for a shared, safe future for all.
  Possible imagery: Showing a diverse range of activities.
- What do those involved in the anti-nuclear movement do apart from marching and negotiating?
  Possible imagery: Showing protesters in diverse roles (social and political roles, as citizens).
- Visualizing collaboration among people from different backgrounds: among different civil society actors, grassroots activists; among scientists, researchers, officials from different countries; at conferences, summits, meetings.
- Activities, initiatives and interventions from survivors.
    - The hibakusha (Japan) and their descendants have been very active in the past, both in maintaining and forming public memory culture as well as in collaborating with other affected groups and organizations (incl. the ICAN, state actors).
- Visualizing milestones and achievements:
    - The 2017 Nobel Peace Prize for ICAN
    - 26 September as the International Day for the Total Elimination of Nuclear Weapons
    - Notable historical protests against nuclear warfare
        - e.g. activism and protests in Northern America, Europe, Asia & Pacific
    - Notable historical figures protesting nuclear warfare/supporting disarmament (e.g. Albert Einstein).
    - Successful public pressure:
        - Nuclear Treaties and Agreements
            - Focus on specific aspects of implementation, e.g. counterproliferation monitoring: How is compliance monitored? Which visual evidence is there?
            - Show processes behind: negotiations, meeting spaces, individuals at meetings, organizations, etc.
- Showcasing successful public pressure efforts, for example:
    - In 1959, a letter in the Bulletin of the Atomic Scientists was the start of a successful campaign to stop the Atomic Energy

Commission dumping radioactive waste in the sea 19 km from Boston. Public pressure and the research results subsequently led to a moratorium on above-ground nuclear weapons testing, followed by the Partial Test Ban Treaty, signed in 1963 by John F. Kennedy and Nikita Khrushchev.

- Public memorials
    - Museums (of science, energy, etc.), monuments, uranium molecule models.
    - Peace memorials, local and regional peace initiatives
    - Hibakusha hold annual peace ceremony on the anniversary of the atomic bombings in Hiroshima and Nagasaki
        - Example image (includes other images): https://www.flickr.com/photos/curacumba/23533062353/
        - Visits from high-level leaders (e.g. Barack Obama)
- Images of activist and artistic interventions (against nuclear war, against nuclear testing, against nuclear energy, etc. + for peace, for disarmament)

Possible effects of alternative imagery

It might be easier to imagine the end of the world (particularly by way of atomic bombs) than a utopia, the saying goes. However, this phrase is a symptom of a particular worldview - applied to the nuclear context, it ignores contemporary and past efforts as well as achievements of actors involved in working towards a non-nuclear future.

Visualizing solutions and existing achievements counters the overwhelming sense of despair that is usually associated with violence, war, and weaponry. If many aspects of the nuclear field are hidden from the public, it is the efforts of the anti-nuclear movement that enable audiences to develop proactive engagement, providing clear pathways for involvement. Furthermore, such imagery helps to demystify the disarmament process, highlighting diverse benefits of disarmament.

Balanced reporting means not only focusing on the problem side of an issue but including solutions - an approach that has been termed ‘solutions-oriented journalism’ in the past years. With respect to nuclear issues, including solutions can transform the narrative around nuclear weapons and disarmament in order to emphasize feasible and positive solutions and outcomes, fostering greater public support for the efforts and nourishing public pressure for policy change.

Disrupting Nuclear Stereotypes

It is a truism to say that the media often contribute to perpetuating stereotypes. Over the past years, biases in the media representation of different social groups, especially of people from disadvantaged backgrounds, have increasingly been debated and contested - prompting media channels to gradually draw on a more diverse imagery.

The stereotyping of (groups of) people manifests visually in the repeated publication of images that stress a restricted number of features, leading to a biased representational pattern. Stereotypes help to assign groups of people certain characteristics and societal roles and construct associations between these groups and certain issues (e.g. between 'Black men' and 'crime').

A similar mechanism is at work in the 'nuclear discourse' - we see a number of objects (e.g. missiles), actors (e.g. male high-level politicians), and situations (e.g. explosions) depicted over and over, which creates a nuclear stereotype in the public imagination. This stereotype is easily activated when nuclear issues are discussed and restricts possibilities of engagement for the public. Disrupting nuclear stereotypes thus allows broadening the public imagination and ultimately contributes to the democratization of the nuclear field.

There are 3 main possibilities to counter stereotypes (Hall 1997: 259):

1) **Counter-stereotyping** means reversing the stereotype. This can be done by showing a person in a role or situation stereotypically assigned to a person from another social group. Counter-stereotyping also involves creating new images that directly challenge and replace harmful stereotypes.

2) **Appropriation** entails attaching the stereotype or an element from it with a new meaning. This new meaning can be positive when the aim is to counter stigmatization. It can, however, also be negative, especially when the aim is to emphasize a threat and focus public awareness on a societal problem (such as the nuclear field).

3) **Deconstruction** means disclosing or explaining the stereotype so that it can be recognized as a stereotype by the audience, for example by adding context or naming it as such.

The following examples of challenging stereotypes include the most stereotyped aspects regarding nuclear weapons: the weapon itself, the

people affected, the experts and decision-makers as well as the anti-nuclear movement.

The Bomb

Stereotypical imagery	Non-stereotypical alternative
Ballistic missiles and mushroom cloud explosions are often depicted as phallic symbols (such as pointing upwards)	Appropriation: Juxtapose images of missiles/explosions with: a) imagery showing the effects of the nuclear industry on concrete communities and people b) images showing the destructive aftermath of nuclear explosions
Military parades featuring nuclear missiles	Deconstruction: Highlight (in caption or story) that military parades celebrate weapons of mass destruction and violence.
Popular culture and historical artifacts have constructed 'nukes as cool'	Deconstruction: Depict cultural artifacts (for example, vintage games or nostalgic items) and lay bare their ideological function as tools of propaganda and/or the result of a post-World War II 'nuclear culture'
Aestheticised images of nuclear arsenals and weapons perpetuate the notion of 'modern, safe, clean, green nukes'	Counter-stereotype: Replace sanitized images of weapons with visuals depicting the invisibilized, 'dirty' side of the nuclear industry (unusual visuals from the production cycle, images of workers and the impact working in the field has on their health and social life). Use images and stories of survivors from nuclear attacks and disasters. Depict the situation and lives of communities affected by nuclear fallout. Deconstruction: Naming the stereotypes, e.g. that a nuclear weapon is neither 'cool' nor 'modern' but actually a dangerous, destructive item whose appeal is based on an outdated logic from after World War II.

The People Affected

Stereotypical imagery	Non-stereotypical alternative
'People affected' are assumed to be only victims of nuclear attacks in the past.	Counter-stereotype: Many other groups of people are affected in many ways - impacting their health, their family lives, their livelihoods, their possibilities of voicing their concerns or impact decisions, etc. Publishing their images and their stories challenges the stereotype of nuclear impact.

Passive victims (e.g. in Hiroshima and Nagasaki)	Counter-stereotype/Appropriation: The survivors of the attacks in Japan have been involved in transnational peace advocacy, research, and other fields. Imagery can feature individuals or their achievements, such as Setsuko Thurlow, a Hiroshima survivor and prominent anti-nuclear advocate.
(Almost) no images of survivors	The lack of images of survivors from the Hiroshima and Nagasaki attacks sustains the notion of the nuclear weapon as an abstract danger or source of power. Counter-stereotype: Actually publishing images of survivors. Deconstruction: Explaining why images have rarely been circulated (US censorship, geopolitical contexts in the 20th century, role of media).

The Experts and the Decision-makers

Stereotypical imagery	**Non-stereotypical alternative**
'Experts' are assumed to be male and white.	Counter-stereotypes: Female scientists and scientists of color from across the globe. Scholars and activists, whose expertise has been sidelined in official debates. Deconstruction: Adding context to existing imagery that challenges the notion of the male and white expert or explains why the voices of others are marginalized.
Flags, world maps, graphics - which make the issue seem less 'human' and more like a strategy game.	Counter-stereotype: Humanizing the issue by adding imagery and stories of people, which challenges the detachment of nuclear issues from daily lives of audiences.
Nuclear arsenals and weapons only from a small number of countries (often from the US and a number of states considered 'reckless' such as North Korea).	Counter-stereotype: Realistic images indicating the responsibility of countries such as Germany, Italy, the Netherlands, Belgium, or Turkey. Appropriation: Convoys and trucks carrying intercontinental ballistic missiles (ICBMs) are commonly associated with Russia, India, Pakistan, and North Korea, but rarely with the US, UK, and France - doing so would contribute to stigmatizing the leaders responsible and extend the negative meaning of nuclear war to other contexts.

The Anti-Nuclear Movement

Stereotypical imagery	Non-stereotypical alternative
Local protests	Counter-stereotype: Highlighting transnational links of organizations (by including imagery from different contexts and organizations or featuring the work of networks such as ICAN in different countries/contexts). Appropriation: Celebrities from popular culture that have mobilized against nuclear weapons in the past or are currently involved in advocacy efforts (e.g. Jane Fonda).
Black and white imagery suggesting that criticism is outdated	Counter-stereotype: Images and voices of scientists, experts, activists arguing for the relevance of opposition. Appropriation: By highlighting that opposition to nuclear weapons has been necessary in the past as much as it is necessary in the present, the historical context is given a new meaning. Deconstruction: Providing context about power-related dynamics in the nuclear field, leading to the amplification of lobbyist positions and the marginalization of activism.
Images that ridicule the movement as a narrow(-minded) opposition against a minor issue	Appropriation: Visual examples of grass-roots initiatives, activists, and scholars who advocate for linking nuclear issues with other approaches, e.g. anti-racism, decolonial or feminist approaches.

Learning from climate change visuals

Photographs have been used to establish societal awareness on pressing issues since the late 19th century. The history of humanitarianism has relied on photographic documents as evidence, enabling public pressure and shifts in policies. Empirical evidence suggests that iconic images are instrumental for mobilizing against exploitation, inequality, and violence.

Environmental (visual) communication is a particularly relevant example of effective, strategic use of imagery for influencing public opinion. Lessons from the development of the climate change narrative can therefore serve as impulses for changing nuclear-related visual patterns. There has also been an increasing amount of research on visual communication with respect to climate change, addressing recurrent themes as well as effects on audiences.

Imagery in the context of climate change shows a number of **recurrent themes**: it often depicts identifiable, high-level **individuals** (from politics, science, business, popular culture); it visualizes the **causes** of climate change and depicts climate **impacts** in local and global contexts. It includes "**iconic visuals**" that anchor a concrete story, "**symbolic visuals**" that add broader meaning beyond the concrete situations depicted on images (e.g. 'smokestacks' pointing towards industrial air pollution), and "**spectacular visuals**" that aim at generating emotional responses (e.g. extreme weather events) (Saffron/Smith 2014).

However, while **clichéd climate-related images** (polar bears, melting ice) are easily recognizable for audiences and studies suggest that they are linked with **support for climate-related policies and action**, such imagery also leads to **emotional numbness** and prompts cynicism (Nesbit et al. 2017). With respect to the agenda-setting function of media, empirical evidence confirms that it is the emotional response to images that drives the **visual agenda-setting effect** (ibid.) - a result additionally backed by insights from social cognition and neuroscience (Ewbank et al. 2009).

Empirical evidence confirms that "**different types of climate change imagery** have the potential to generate **different public perceptions of the issue**, with images of **actions** to address climate change associated with greater perceived **self-efficacy**, and **impact** and **pollution** images associated with greater perceived issue **importance** but lower perceived self-efficacy" (Hart/Feldman 2016). Different images thus have different effects. While **dramatic images** capture the **attention** of audiences, they

do not incite action but rather tend to leave viewers **overwhelmed** and **passive**. **Positive emotions**, on the other hand, lead to viewers wanting to **act and pursue solutions**: photographs of climate protests, leaders signing agreements, people installing solar panels. Researchers have repeatedly found that images *either* contribute to viewers seeing an image as important (increasing 'issue salience') *or* inspire them to act (increasing feelings of 'self-efficacy') but rarely do both (ibid.). However, even though increased awareness of climate change does not necessarily lead to behavioral changes, it does help building up public pressure and influences policy making, especially through voter behavior (Venghaus et al. 2022).

Findings further suggest that "[g]lobal, distant, and/or decontextualized images of environmental damage and suffering are more difficult to relate to and/or act upon than those that depict concrete local environmental problems that people can relate to." (Hansen 2017) Scholars have also noted that 'ordinary people' are framed differently from individuals associated with authority. "Ordinary people are depicted as 'suffering impacts of environmental conditions or engaging in efforts to mitigate or adapt,' while authority figures are shown in active agency roles studying, reporting (scientists), or urging or opposing action (political figures and celebrities). (...) [T]his conveys very different visual messages, on the one hand, about [leaders and experts] who are invested as authoritative 'agents of definition' for environmental issues and, on the other hand, ordinary people whose voices are marginalized." (Hansen 2017) Furthermore, while images of celebrities and politicians undermine the will to act, images of meetings (such as diplomatic negotiations) and protests can affect collective action intentions (Gulliver et al. 2020). Engagement of 'ordinary citizens' can be most effectively motivated by "non-threatening imagery that link[s] 'individual's everyday emotions and concerns'" (Hansen 2017).

According to **social movement research**, images play a central role in developing public acceptance for the issues movements advocate for. However, it is not only the **proliferation** of media with relevant images or visualizations of protests that matters: empirical evidence suggests that imagery should be "**familiar, expected, and compatible** with the mainstream experience" so that protesters avoid being marginalized (Doerr et al. 2013: xiv). At the same time, social movements need to **challenge dominant interpretations** and narratives and thus circulate "**counter-hegemonic images** that recall, but at the same time subvert, hegemonic discourses" (ibid.), which remains a challenge for social movements in many contexts.

The movement involved in climate issues has succeeded in reframing climate change in terms of 'climate justice' since the 1990s. It has emphasized responsibility and social justice, emphasizing the transnational character of both the problem and the solutions:
"Climate justice as a frame allows for actions that can be pursued through much more local and active channels, whereas it may be argued that climate change could only effectively be pursued through pressuring international organisations and national governments. Thus, climate justice as a frame brings the movement back to its radical roots – this target can be pursued by concrete action at local levels. Second, the climate justice frame is broader in its appeal, allowing the movement to (re)connect to other movements that its framing work identifies as linked and pertinent to its own goals." (Della Porta/Parks 2014)

Lastly, **audiences** respond to images and media reporting in general not as passive consumers but rather according to their own **backgrounds, experiences, and expectations**. Accordingly, "interpretations of climate change representations are - not surprisingly - influenced by multiple factors, including not only personal experience, but also people's prior values, beliefs, and norms, and indeed whether representations are famed in terms that provoke fear and therefore result in disengagement and psychological avoidance" (Nesbit et al. 2017).

What are the lessons for 'nuclear reporting' that can be drawn from these insights? First, it can be argued that most of the aspects mentioned above are relevant for visual communication on nuclear weapons. Second, it becomes obvious that imagery does not have one unequivocal impact but rather different images serve different purposes. Third, this makes it all the more important to consciously and deliberately visualize stories with appropriate images.

Finding images

The development and dissemination of alternative perspectives on nuclear bombs take time—and journalism and communicating organizations have the power to portray this visual world in a more diverse and nuanced way than the current tenor. Which strategies can you follow to access imagery that extends the dominant, narrow framing of nuclear weapons?

Commissioning visual stories

If you have the opportunity, **commission stories**. This allows for breaking out of the broad visual discourse and equipping often overlooked stories with the appropriate images and videos (such as stories of survivors, communities impacted by nuclear testing and waste disposal, and environmental impacts).

More diverse voices are needed for telling these complex stories. Make use of companies such as fairpicture.org, which can organize assignments with local creators who are familiar with the contexts and the history of nuclear impacts in their region and speak the local languages. Context and ethical storytelling practices are key in the ambition to create a more holistic image.

Historical and contemporary image sources

There are numerous sources for existing images related to the discussed aspects, found within various organizations and archives. For example, nonprofit organizations focused on nuclear disarmament, environmental issues, and public health often have resources, reports, and images available for public use. Examples include the Nuclear Threat Initiative, Greenpeace, and the International Campaign to Abolish Nuclear Weapons (ICAN). Looking for these resources will not only make the discourse more diverse but will also help establish links between these organizations.

Additionally, universities and research institutions maintain digital archives of historical materials, including photographs related to nuclear weapons development, testing, use, and impacts. Online libraries, archives, and stock websites also offer historical images. Groups like "The Atomic Photographers' Guild" can provide valuable images and information.

Link collection:

Atomic Reporters, Image Library:
https://www.flickr.com/photos/194939863@N03/
https://www.atomicreporters.com/

Atomic Reporters is an independent non-profit organization that provides journalists with impartial information about nuclear science and technology to encourage informed reporting.

National Museum of Nuclear Science & History, Online Collections Database:
https://nuclearmuseum.pastperfectonline.com/
The US-based museum is an affiliate institution of the Smithsonian and offers a large collection of imagery related to nuclear history. Many of the images can be used for anchoring the issue of nuclear weapons: they include photographs of merchandise from nuclear testing sites, postcards, games, items from popular culture, 'nostalgic' memorabilia and other artifacts.

Museum of Peace at the University of St. Andrews, Gallery 'Visualising Peace':
https://peacemuseum.wp.st-andrews.ac.uk/gallery/visualising-peace/

US National Archives, Catalog:
https://catalog.archives.gov/

NASA Image and Video Library:
https://images.nasa.gov/

Atomic Heritage Foundation Resource Collection:
https://ahf.nuclearmuseum.org/ahf/history/resources/
A collection of resources (not just images) that might be helpful for finding additional image sources.

Artificial Intelligence

The use of AI for image generation (and cartoons) offers the possibility to quickly come up with unexpected, creative, and compelling counter-images. These tools can help create thought-provoking visuals and find new avenues in communication. However, it is crucial that the individuals generating these images are sensitive and reflective about the power dynamics of the nuclear weapons discourse to avoid reinforcing problematic mainstream narratives. Additionally, we must be aware that AI, by design, will reproduce stereotypes and concretely reinforce discrimination and inequality. These tools invite users to be creative, yet demand continuous caution.

Conclusion

Dominant frames in the (visual) discourse on nuclear weapons privilege themes that distance the audiences from the existing humanitarian impact of both nuclear power and the threat of nuclear weapons (Panico 2023). While a 2023 study suggests that the (US) public wants more information about both nuclear weapons and policies (Smeltz et al. 2023), existing patterns of (visual) communication often inhibit deeper understanding and prevent democratic engagement with the issue.

Against this backdrop, the strategies for deliberate use of imagery suggested in this report can be summarized as follows:

1) Humanize the impact:
   The actions, experiences, stories, and suffering of concrete people is part of the nuclear history and present. Concrete people work in the nuclear industry, concrete individuals profit from it, concrete communities are impacted by nuclear fallout. Showing and naming people while explaining the contexts is an important step in professional reporting informed by the values of impartiality, independence, and accountability. The humanization of the nuclear field is not a sentimental or merely a moral question but a necessary element in accurate and balanced nuclear reporting.

2) Visualize the complexity:
   There is no global or societal consensus for the support of nuclear weapons (or nuclear power, for that matter). Stories covering different aspects and including unexpected angles allow audiences to develop an understanding of the vast (and already existing) impacts of the nuclear field. Exposing processes behind nuclear weapons production, highlights hidden costs and ethical concerns. Furthermore, nuclear weapons are a global issue: using visuals that illustrate the global nature of nuclear risks, including international protests, diplomatic efforts, and the interconnected effects of nuclear policies, enable audiences to understand global interdependencies.

3) Highlight activism and solutions:
   The anti-nuclear movement can look back at major achievements and successes of both symbolic and political value. Most importantly, organizations and individuals in the movement are experts in the field. Showcasing their work means challenging

dominant notions of 'expertise' that perpetuate processes of democratic exclusion. Including important, high-profile individuals from the anti-nuclear opposition as well as grass-roots activists and groups allows audiences to understand the contested field and the dynamics behind it. Moreover, highlighting successful disarmament efforts and the activism of communities supports audiences in imagining a nuclear-free future.

Narratives build on representational patterns. One single picture does not change a whole narrative. It will take a collective effort to alter the discourse around nuclear weapons in a sustainable manner. However, each picture matters. Each story that allows audiences to understand the importance of the issue and/or inspires them to engage contributes to change. Images and stories are the building blocks of the narrative - changing them helps make the discourse around nuclear weapons not only more just but also more accessible, balanced, and objective.

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