

## EDITORIAL

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In his Encyclical Letter *Laudato Si'* of 2015, Pope Francis recalled Saint Francis of Assisi's care for Mother Earth, "our common home", akin to a "family" with whom we share our life.<sup>1</sup> This notion rhymes across many cultures and spiritual traditions. In the ancient Indian dictum "*Vasudhaiva Kutumbakam*", the sage declares: "the whole world is my family".<sup>2</sup> The first astronauts, who looked out of the porthole at the beautiful blue dot that is our planet, must have felt a similar emotion of oneness and belonging. All of humanity shares a common living space along with the wonders and vulnerabilities that go with this inescapable fact.

Historically, this idea of "commonness" has been practically divided into specific domains: pastures and fallow lands shared by rural communities, river waters shared across borders, maritime commons beyond the reach of cannon balls, and so on. A rich body of knowledge, law and practical guidance has developed around each of these "commons" and their lay users and expert practitioners routinely and systematically feel its normative effect. Mishaps, for example ships running into each other, and mischief, such as sewage being discharged into water sources, are discouraged while responsible use is promoted under the rationale of common good.

In modern times, the laws of the commons for outer space and the seas have grown in sophistication and importance as has the need for impartial normative frameworks. International conventions and bodies such as the UN Convention on the Law of the Sea (UNCLOS) and the International Tribunal on the Law of the Sea (ITLOS) have come into being. Promotional work and capacity building for the good use of the commons has become a priority, for instance through the UN Committee on the Peaceful Uses of Outer Space (UNCOPUOS) in Vienna.

In parallel, a global consciousness has developed as means of communications and transport have brought people living in different parts of the world much closer. News channels beam images of tragedies and triumphs from across the globe into our living rooms. We can feel the ripple effects of faraway events on our pension funds, on our weather and on our health. Civic action, for long a very local phenomenon, has developed a transboundary character through movements such as the climate change related Extinction Rebellion.

In sum, we live amidst a number of commons, some more tangible than the others, almost all bestowed on us by nature. Even though it is manmade,

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an interesting candidate for joining the ranks of global commons is the digital realm. Its importance has grown exponentially since the internet protocols were invented in the 1970s and especially since the World Wide Web was offered by CERN scientists as a global public good in 1989. Our lives are unimaginable today without the countless services facilitated by digital networks and devices. The COVID-19 pandemic was a stark reminder of this dependency.

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In military parlance (unfortunately) cyber has already joined land, air, sea and space as a domain for offensive and defensive actions. Societally, we have become used to meeting people ‘on Internet’ and working or playing with them. The virtual metaverses imagined by the Silicon Valley tech giants might still be decades away but there is no denying that a significant global population spends a large part of its waking hours roaming this domain.

The digital world is also witnessing a familiar tragedy of the commons. In the manner of the badly governed commons of the past, criminals and buccaneers of all sorts abound. Digital pirates cross boundaries to wreak havoc at will. Data is extracted and exploited unfairly and personal privacy and wellbeing is subordinated to commercial advantage. States are often helpless or clueless about what goes on in the digital realm and how to police it. The regulatory tools at their disposal were designed for a pre-digital world and are either ineffective or too blunt. Truth be told some actors do not actually mind a degree of lawlessness as they pursue narrow or monopolistic goals even if this poisons the well for everyone in the long run.

As this publication powerfully argues, a global commons approach to the digital realm makes eminent sense to prevent lawlessness and promote good use. There is a lofty ambition in Article 1 of the 1967 Outer Space Treaty - “The exploration and use of outer space [...] shall be the province of all mankind.”<sup>3</sup> Could this guiding principle be extended to the digital realm, which in many ways is already the province of all mankind?

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Could we take another leaf from that book? The international community took an important preventive step through the Outer Space Treaty by banning nuclear weapons and other weapons of mass destruction from outer space. This prevented terrestrial conflict from extending into outer space. While efforts to prevent an arms race above our planet continue, they rest, at the very least, on a solid foundation.

While it might be too late to uninvent cyber weapons, there might be value in restricting their use, say against critical civilian infrastructure and electoral institutions, and declaring certain parts of the digital commons as sanctuaries protected from cyber conflict. It might also be valuable to turn humanity away from developing autonomous weapons systems that can take life on their own without human control and accountability. This precautionary principle is inspired not only by the outer space commons but also by others from the environmental and health domains.

What ultimately makes a commons is the aspect of use. A commons walled off to everyone will soon be a ruin. And walled gardens for the select few are clubs and not commons. Therefore, in addition to the regulatory and control aspects, we must pay attention to promoting common benefit as well as inclusiveness in the use of the digital commons. We need both guard rails and common rails in the form of public goods.<sup>4</sup> In practical terms it means bringing “missing” users and information into the commons, and avoiding “missed” use due to lack of interoperability and other enablers in addition to preventing “misuse” through norms and other rules of the road.

At its most basic level, the “3 Ms” approach requires a renewed effort to bridge the digital divide.<sup>5</sup> The half of humanity that does not have access to cyber space must be enabled to participate in the digital commons. This access must be affordable and meaningful. If the next billion to come online from Africa, Asia and Latin America can only use social media, games and entertainment on their devices, they would not be able to truly benefit from the transformative power of the digital domain. They will remain forever trapped in a low-value segment of the digital economy as mere consumers of content made by others for the benefit of others.

Beyond meaningful and affordable access, we also need agency over the data economy. This means going beyond the data protection paradigm to a data empowerment paradigm.<sup>6</sup> The protective effect of giving informed consent to data collection at the outset of signing up for a digital service gets eroded if consent for data sharing with third parties is collected in advance and in broad terms. Separating consent to collect from consent to share can open new avenues for citizens to participate in the digital economy. This can also help startups and small firms reach a more equal footing with the big tech giants.

The digital commons of the future would also require distributed digital architectures and data infrastructures that level the playing field for all users. Today, bar a handful of tech companies and research institutions in high income countries, researchers working with large data sets and artificial intelligence (AI) have limited access to high performance computing and cloud capacity. A federated infrastructure that would help develop capacities closer to where the use is, promotes collaboration and allows local data to first serve local needs will be critical.<sup>7</sup>

Ultimately, building an inclusive digital future requires that the opportunity to build be also inclusive. Leveling the knowledge-making playing field is the real test of our intentions and rhetoric on inclusiveness, diversity and equal opportunities. If knowledge-making remains limited to a few, if ‘problem-solvers’ take data from ‘problem-owners’ to develop solutions, the digital commons we are hoping to build will fall short of Pope Francis’ touchstone of the human family. In a family, no one gets left behind. We build others to build ourselves because in their strength is our strength.

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Mahatma Gandhi gave us a talisman years ago to weigh our actions when in doubt. Recall the face of the weakest, the most wretched person you know, and ask yourself if what you do will help that person. Then act. As we set out to build the digital commons it is worthwhile asking who we are building it for, why and with whom.

This publication presents some outstanding reflections to get us started. It eschews the “technocratic paradigm” and fosters the “culture of encounter and interdisciplinary dialogue.” It is hopeful about a better world “thanks to technological progress, if this is accompanied by an ethic inspired by a vision of the common good, an ethic of freedom, responsibility and fraternity, capable of fostering the full development of people in relation to others and to the whole of creation.”<sup>8</sup>

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#### NOTES

1. Pope Francis, Encyclical Letter *Laudato Si'*, 24 May 2015
2. Maha Upanishad, date unknown
3. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, UN General Assembly Resolution 2222 (XXI), 19 December 1966
4. Amandeep S. Gill, “Imagining the AI Future”, *The Survival Editors Blog*, 2 January 2020
5. Amandeep S. Gill and Stefan Germann, “Conceptual and Normative Approaches to AI governance for a global digital ecosystem supportive of the UN Sustainable Development Goals (SDGs)”, *AI and Ethics*, 6 May 2021
6. Vikas Kathuria, “Data Empowerment and Protection: Concept and Assessment”, Observer Research Foundation. *ORF Issue Brief* No. 487, 12 August 2021
7. Amandeep S Gill, “Realising the promise of digitally-enabled health”, *Globe*, 6 April 2020
8. Pope Francis, Address to the participants at the meeting on “Common Good in the Digital Age”, 27 September 2019