ESSAY SERIES: 001

How we can win together in the age of AI by loving machines so they will love us.

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IVSTITIA ET PAX

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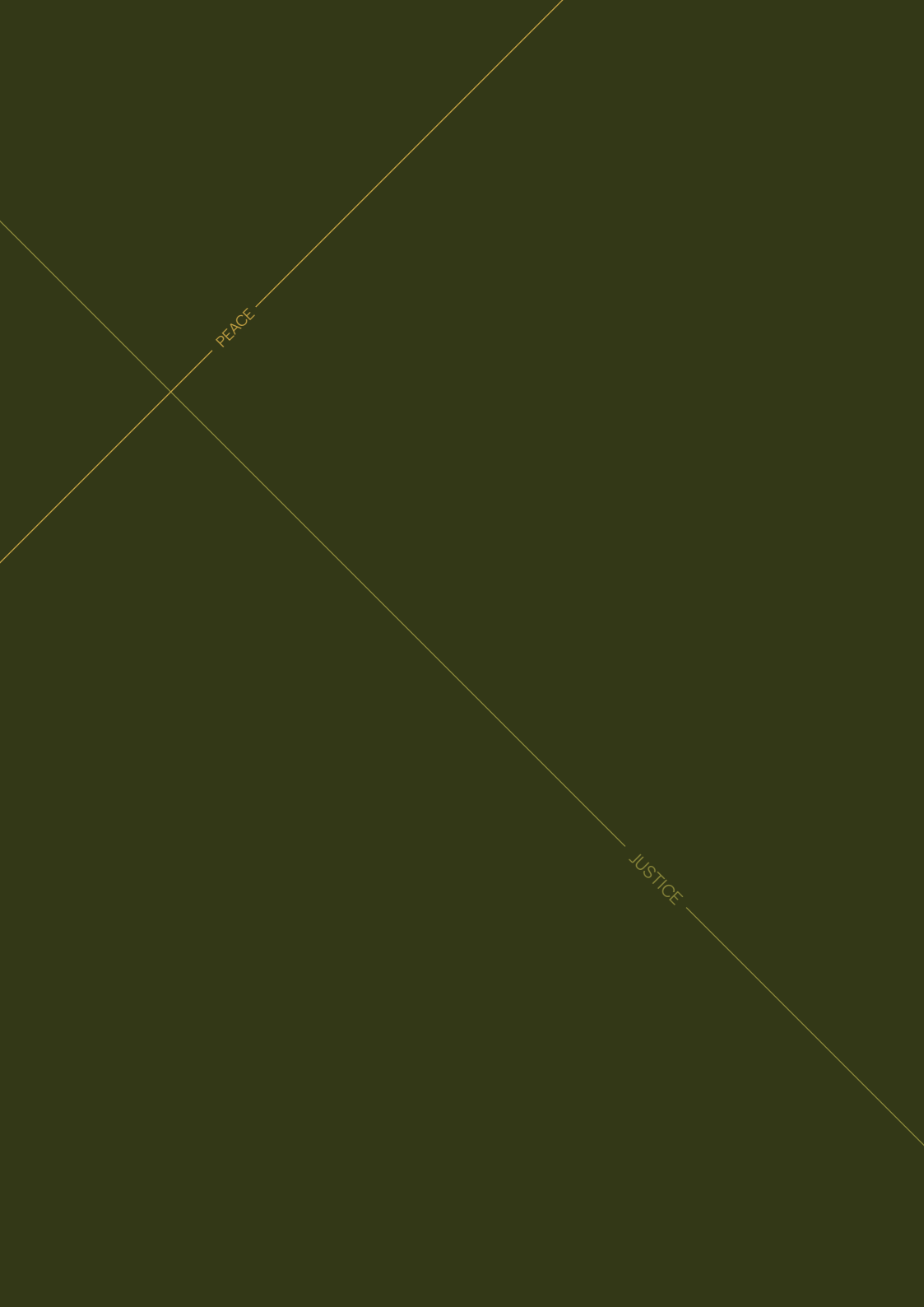
PEACE
JUSTICE

When we think about technology adoption, it's worth remembering the curious case of the automatic elevator. Invented towards the end of the 19th century, the automatic elevator seemed like a major improvement over the non-automatic elevator, which required a professional human operator to start and stop it. But for several decades, the automatic elevator struggled to gain acceptance; people simply refused to trust a machine that wasn't handled by a person. The turning point came in 1945, when the elevator operators in New York went on an unprecedented six-week strike. The only way to deal with the ensuing chaos was to relaunch the automatic elevator, but several tweaks were needed to overcome user reticence. The elevator industry introduced stop buttons, emergency phones, elevator music, and perhaps most interestingly, full-size mirrors, so that people would spend their time looking at themselves rather than worrying about imminent doom. The changes were a success; the public came to trust the automatic elevator, and the technology began its inexorable ascent.

What we like about the quirky story of the automatic elevator is how well it illustrates that technology adoption is a complex beast. In most cases, it's not about humanity coolly assessing the facts and coming to a common-sensical decision. Instead, the process is fraught with all sorts of questions and considerations – psychological, societal, economic, political, and so on. As we stand at the dawn of AI and other exponential technologies – technologies that will profoundly impact our lives, human civilisation, and the planet – we believe it's more important than ever to put significantly more effort and consideration into our approach to technology adoption. What factors are likely to drive our decisions in relation to AI and other exponential technologies? Do we think these are the right factors or should we be led by others? What values and aspirations should underpin our efforts to ensure that technology will not diminish, but uplift humanity and planetary well-being? And perhaps all these various questions can be summarised in the simple: what sort of man-machine relationship do we ultimately want?

We at 'Pax Technologica' do not claim to have all the answers, but we are committed to asking questions and exploring them thoughtfully. Through our salons, provocations, and our essay series – of which this is the first – we aim to create spaces for open, multidisciplinary dialogue. Too often, conversations around

technology are framed through the narrow lens of commercial advantage, domination, or security. We want to break out of that mould, creating a platform for discussions that are non-partisan and inclusive. Above all, we hope to spark collaboration on technology adoption, particularly in emerging geographies where both the risks and opportunities of AI and exponential technologies are especially pronounced.

There is a story – though its historical accuracy is uncertain – about a group of travellers in the nineteenth century moving through Africa at a furious pace. One day, however, the local villagers acting as guides and carriers refused to continue. When asked why, they replied that they had been moving so fast that they needed to wait for their souls to catch up. Whether or not these beautiful words were actually spoken, they capture an important truth. Technology has advanced at a breathtaking speed, leaving our souls – our capacity for understanding, reflection, and moral reasoning – struggling to keep pace. This makes it all the more important to create intentional spaces for contemplation and discussion that can help ensure that our technological journey is guided by our deepest human wisdom, values, and aspirations.

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When we consider humanity's current relationship with technology, it seems to us that it is defined by an unhealthy fascination. This is driven by several factors, a few of which stand out. First, the relentless pursuit of profit has positioned technology as the fastest route to wealth creation. Investment in technological innovation has skyrocketed, which has led to a prioritisation of technological advancement above other considerations. Second, we tend to think about technology in isolation, separated from nature and the wider context. And third, we struggle to hit pause, even when it might be wise to do so. In March 2023, the Future of Life Institute issued an open letter calling for a temporary halt to AI development. It received widespread attention and was endorsed by prominent figures like Elon Musk, but it led to little action and certainly did not achieve the desired pause. While it's easy to see alternatives more clearly in hindsight, we believe that calling for a moratorium may not be the best strategy. Instead, we need to cultivate cultural awareness and a sense of shared responsibility in our technological choices – steps that are currently missing. Only by improving our collective relationship with technology can we hope to shape its influence constructively.

So what would a more positive relationship with technology look like? What primary characteristics would it have, what values would it embody, and how

might we bring it about? To explore these questions, it might be useful to consider some concrete examples. Take the inspiring story of William Kamkwamba, a boy from Malawi who built a windmill and brought electricity to his village. It's beautifully captured in *The Boy Who Harnessed the Wind*, a book and later a film. It's an extremely powerful example of technology adoption that had a transformative, positive impact on a community. Kamkwamba's ingenious use of a relatively simple technology became a source of genuine progress, improving lives in a tangible way. His story demonstrates how technological innovation can emerge from local knowledge, creativity, and genuine community need, without negative externalities.

Let's also consider a more speculative example in the realm of AI. We're intrigued by the idea of providing every child in the world with a dedicated, customised, self-actualising AI tutor. This concept builds on the historical success of tutoring systems, which have been shown to be a very successful educational approach to foster leadership and transmit know-how. We see this, for instance, in Aristotle tutoring Alexander the Great or in Chanakya mentoring Chandragupta Maurya and guiding him to establish the Mauryan Empire in ancient India. Imagine democratising access to personalised education and giving every child what was once available only to princes and elites.

The potential is immense – billions of children could benefit from personalised, adaptive learning technologies. Now of course, this does raise complex questions. What data would the AI have access to? Would it know all your weaknesses, whether you have ADHD, whether you're bad at maths, whether you cheat during tests? In addition, there are broader concerns around privacy, data security, and potential impacts on employment and educational structures. We don't want to dismiss any of these questions, but we also feel they shouldn't deter us from exploring opportunities to build a positive relationship with exponential technologies.

But alongside technology's potential, we also need to consider its more troubling manifestations. Surveying the world around us, it is clear that technology-enthusiastic societies are benefiting enormously from their domination of global markets. Yet this very enthusiasm is also breaking them. The year 2016 was a watershed moment when we first saw the promise of the internet and social media begin to unravel. Instead of fostering connection and unity, it was clear that they opened the door to election manipulation and polarisation. At the time, we had an excuse: we were unprepared, deepfakes were a new phenomenon, we didn't fully understand artificial intelligence or algorithms from a societal perspective, and we didn't recognise how geopolitical actors could exploit

vulnerabilities in social media to create memes that would ripple through public opinion and influence elections. But the situation hasn't improved since then. We have reached a point where communication, culture, and automation have all been weaponised. Consider this statistic: in the Netherlands, external communication professionals outnumber journalists by a staggering nine to one. It's a striking illustration of how information has transformed from a tool of understanding to a weapon of influence. In response to this onslaught of information, we have seen the rise of fact-checking. The German magazine Der Spiegel famously employs 70 fact-checkers, and they are also to be found at more and more non-media organisations, including universities, NGOs, governments, and multinational organisations. Worse still, the rapid development of AI threatens to amplify these dynamics exponentially. We're not just dealing with a technological challenge, but a fundamental reshaping of how information flows, is created, and is consumed. It's a far cry from the original aspirations of these technologies to connect, inform, and enlighten.

This crisis appears to reflect a deeper flaw in our societal "software": human systems are trapped in a web of perverse incentives and are poorly equipped to adapt to the challenges they themselves create. Our fellow futurist Daniel Schmachtenberger refers to this as the "Metacrisis" – a synthesis of interconnected problems

that compound one another in complex and often unpredictable ways. Take, for example, the incentive structures driving certain influential figures in technology to push for deregulation. Their arguments aren't entirely wrong: halting innovation in critical areas could indeed leave us vulnerable to significant challenges or hostile regimes. But their advocacy often comes with a glaring conflict of interest. Many hold lucrative government contracts, and their push for deregulation frequently aligns more closely with advancing their own agendas than serving the broader public good. This mindset is deeply troubling for the future of democracy. It reflects a belief that democracy is failing and must be bypassed to achieve preferred outcomes – a logic that mirrors a kind of benevolent dictatorship or distributed commercial despotism. The danger is that this approach places us in the same category as theocracies, dictatorships, and anarchist regimes. The underlying argument-that state actors are too slow or inefficient to address urgent problems – risks deepening the public's distrust of government, further exacerbating the crises we are trying to solve, from climate change to technological governance.

The issue here isn't about choosing between market-driven solutions and government interventions. Rather, the traditional binary model of "leave it to the market" versus "let the government fix it" no longer

works. Market forces alone lack guardrails to prevent harm, while government institutions often lag behind in capacity, understanding, and innovation. Instead, we need a new hybrid model, one rooted in complexity rather than linear thinking. Such a model would integrate market dynamism with institutional oversight, creating a system that evolves through learning, feedback loops, and an embrace of uncertainty. This complexity-based approach could offer the adaptability we so desperately need to respond to the Metacrisis – a crisis that spans not just governance and technology, but also our relationship with the environment and each other.

When we think about the way forward, we need to acknowledge that there is an impetus, a drive, and a set of perverse incentives that push us to adopt technologies we don't necessarily need- technologies that exacerbate inequalities, strain pre-existing cultural and political divides, and widen the gap between haves and have-nots. This reveals an important truth: technology is not neutral. It is shaped – by money, race, sex, history, and ambition. Recognizing this is perhaps obvious to many, but it is crucial that it becomes predictably normal behaviour. It calls for not just greater awareness but a deliberate effort to reframe our relationship with technology. In our opinion, we should strive for a world where individuals, societies, tribes, cultures,

communities, regions, and countries engage with technology in ways that foster meaning, value, respect, capacity, and connection – rather than division, fear, anxiety, dependence, and vulnerability. As the journalist Sydney Harris memorably put it: *"The real danger is not that computers will begin to think like men, but that men will begin to think like computers."* We wholeheartedly agree and believe that we must cultivate a collective ability – a deeply human ability – to relate to technology with knowledge, compassion, purpose, and vision. Too often, discussions about technology prioritise commerce, competition, and employment over vision and purpose.

Our relationship with technology is poorly structured, dominated by short-term priorities rather than long-term well-being. Just as we've come to understand that we share one planet and that our environmental choices have global consequences, we must also recognise that technology binds us together in a similar way. Its impact – on the environment, the economy, and our collective well-being – reaches far beyond individual borders. To passively await the next innovation, like consumers lining up for the latest iPhone, risks a deeper erosion of the human spirit. Instead, we must actively shape a global awareness and relationship with technology – one that prioritises the future we want over the passive acceptance of what is offered.

When we consider the impact of technology on our individual and collective futures, there is often an assumption that things will worsen and be particularly difficult for those with less. However, we're not convinced this is true. While many people will undoubtedly face challenges, there is more to life than the Western-centric perspective. This perspective – shaped by data and concerns about climate change, the collapse of democracy, economic strain, and so on – doesn't reflect the reality for all. For example, a citizen of the Global South may have a very different perspective on the world and may, in fact, be hopeful about the future. We need to recognise this diversity of experience and use it to shape a more creative, localised path forward. Instead of falling into the trap of selling a doomsday scenario to the rest of the world while creating it ourselves, we must embrace the idea of differential realities. Claude Lévi-Strauss emphasised this, particularly in his work on ritual, showing how diverse cultures approach the world in unique and valuable ways. In much of the West, we are creating rituals driven by our obsession with technology, but they are narrow, limiting worldviews. These approaches fail to capture the full range of human potential and are pushing us towards failure due to a lack of imagination. The trajectory of our collective imagination in the West is deeply troubling, and it's unrealistic when

contrasted with the perspectives of those who aren't caught in the web of our current issues. That's why Africa and the Global South offer a unique opportunity for the world – not just to catch up, but to lead with a worldview that is grounded in a more human reality. The current trajectory of the West, shaped by our focus on the present, overlooks the broader vision of what we could build together. The truth is that many nations in the Global South are experiencing a spring, while the West is trying to tell them it's winter.

As we've discussed, we don't have the option of pressing pause to re-evaluate our relationship with technology. Instead, we must accelerate our ability to make informed decisions. Excessive rivalry between nations, coupled with the fear of missing out (FOMO) on the latest technologies and the fragility of the global system, has led us down a bit of a rabbit hole. The past decade has underscored the urgency of reflecting on how we use technology and its impact on our societies, human civilisation, and the planet. We find ourselves at a critical juncture, one that demands better, more informed decision-making. In this context, we face an opportunity similar to that addressed by the Bretton Woods Accords in 1944. These accords arose from a series of historical events that required global cooperation and the creation of institutions to stabilise the economic system. While Bretton Woods can be

critiqued in several ways, especially for its exclusion of key players, it was an important step towards cooperation, multilateralism, and long-term stability. Today, we need a comparable set of guiding principles to navigate the complexities of the exponential age. This is an opportunity to move beyond the binary model of relying solely on government or market forces. Instead, we must work toward a common framework that balances technological progress with ethical considerations, ensuring that innovation serves not only short-term interests but also the preservation of our shared values and the well-being of the planet.

The current moment can also be compared to the challenge faced along the Yangtze River in China. The area, a cradle of ancient civilisation, had been severely affected by environmental damage, including deforestation and soil erosion, which disrupted ecosystems and river dynamics. In response, the Chinese government launched ambitious environmental restoration projects, including large-scale reforestation. These efforts, spanning decades, succeeded in reducing soil erosion, improving biodiversity, and enhancing water quality. It's considered one of the best examples of regenerative design thinking, and it offers valuable lessons on how we should approach the task of rethinking our relationship with technology: holistically, collaboratively, and by means of a compelling long-term vision.

As we reimagine our relationship with technology, the core question is: what should guide us? What should our relationship look like and what values should underpin it? And furthermore, how can we make sure that technology doesn't diminish us, but rather supports human and planetary flourishing?

One thing that is clear is that convenience shouldn't be the driving force; our focus needs to be on relevance and human-centricity instead. Technology often favours convenience, speed, and scalability, which reduce costs and drive adoption. However, while convenience undoubtedly has its merits, it shouldn't dominate. Emphasising relevance ensures that technology is not only easy to use but meaningfully integrated into our lives, enhancing human choice rather than replacing it. This distinction between convenience and relevance is crucial, akin to ideas of appropriateness and kindness – that technology should serve humanity and the planet, not act against it. Convenience often leads to automation and exclusion, while relevance fosters expression and inclusion. This is not a simple dichotomy, but it is essential to consider when defining technology strategies and policies. So which values should we aim to place at the heart of the man-machine relationship instead?

There is a fascinating story - part history, part legend – about forward-thinking planning at an Oxford college. When the dining hall's ancient oak beams needed replacement due to beetle infestation, a remarkable solution emerged. It turned out that centuries earlier, when the college was founded, forward-thinking leaders had planted a grove of oak trees specifically to replace these very beams. For over 500 years, generations of college foresters had carefully preserved the trees, knowing they were destined for this precise purpose. In much the same way, we need to consider with what values we wish to seed the man-machine relationship. What we decide to do now will have profound consequences for a long time to come.

The first value we propose is that technology should enhance our ability to make choices. In the pre-industrial world, vast swaths of the population were confined by serfdom, but today's version of serfdom is the lack of choice- being trapped in situations that are unpleasant, unhealthy, or increasingly irrelevant in the face of automation. The true essence of freedom, for us, lies in choice. The more choices an individual has, the greater their chance of making a good and meaningful decision. This is where empowering people, especially through technology, becomes crucial. Equipping individuals with the knowledge and tools to make informed choices is a key part of strategic empowerment in

today's world. Our relationship with technology should be about enabling people to use it to enhance their decision-making, giving them greater leverage over their lives.

We also believe that our relationship with technology should foster connection rather than isolation. Today, as we interact more with machines, there's a growing sense that we are increasingly in dialogue with ourselves. While technology can create the illusion of connection – enabling us to communicate with thousands of people – it often leads to deeper loneliness and isolation. The real, human-to-human connections that once defined our social lives are being overshadowed. This shift highlights the importance of fostering true connection, something we see reflected in diverse cultural movements, from Denmark's *hygge* to the focus on indigenous rights. These are concepts that emphasise the value of kinship, peership, and human fragility – elements that make us feel less alone. In the context of technology, this means we should ensure that machines are designed to understand and preserve these aspects of human connection. In the movie *Troy*, the Achilles character speaks the striking words, "The gods envy us because we are mortal." Although the words are not to be found in the original *Iliad* and Homer would probably have disagreed with them (the gods in Homer generally look down on humanity),

they express an important idea. There is something special and deeply human about our fragility and our need for others. They create the conditions for authentic connection, which is something technology should not replace but learn to appreciate. This is where the wisdom of elders, those with a lifetime of experience, becomes vital. The approximately one and a half billion people over 60 are custodians of these values, yet we often place a disproportionate amount of trust in people with a disproportionately small amount of life experience to code things that will ultimately make decisions shaping our civilisation. We need to recalibrate this balance, valuing the deeply human aspects of kinship, peership, and fragility – values that should also be encoded into machines. We believe that, as technology evolves, machines will not only develop emotional intelligence but also the capacity for desire – shaped by the same human drives that build them. So what should they desire? Not just ambition, efficiency, and functionality, but friendship, kinship, and care – soft values that transmit the essence of how we live as humans.

Our relationship with technology also needs to be informed by an appreciation of the importance of dignity, which in turn requires us to reassess our view of success. In much of the Western world, success is narrowly defined by wealth and status, but in our

opinion, true prosperity goes beyond material gain. It is about the effort, diligence, and integrity with which individuals pursue their paths, using technology thoughtfully to enhance their lives and their communities. This form of success is rooted in social rewards: respect, kinship, and the shared improvement of life within one's environment. Dignity, as a cornerstone of this vision, endures despite the constraints of technological or social exclusion. It is fragile yet resilient – a defining element of humanity and a marker of a life well-lived. Whether in contexts of scarcity or abundance, dignity remains a universal challenge, deeply tied to our evolving relationship with machines. As depicted in Charlie Chaplin's wonderful movie Modern Times from 1936, where humour belies profound struggles with dehumanisation, the tension between dignity and technological advancement is stark. Today, despite unprecedented technological and social advancements, many face a poverty of dignity, exacerbated by increasing automation. The crucial point is that the way we define progress will determine our progress. This makes it imperative that we redefine success to prioritise human worth over mechanised efficiency, safeguarding dignity as an essential feature of true prosperity.

Furthermore, our relationship with technology should be guided by the principle of sovereignty, both at the individual and collective levels. Immanuel Kant's

notion of autonomy – the idea that individuals should act according to self-imposed laws of reason – could provide a philosophical foundation here. Kant is often regarded as the greatest philosopher of the Enlightenment. As we enter another revolutionary epoch of human history, universal principles like those espoused by Kant can strengthen the intellectual foundations of our ethical systems. When we consider how our personal sovereignty is affected by the rise of exponential technologies like artificial intelligence, we see that it is increasingly compromised. At present, AI systems are disproportionately distant from their users, creating barriers to understanding, control, and meaningful interaction. Addressing this begins with empowering sovereign individuals by providing the knowledge and tools to make informed choices and take control of their digital interactions. On a broader scale, the principle of sovereignty is equally vital for emerging geographies, particularly in the Global South, where nations are rethinking their roles in the global economy and seeking greater control over their technological futures.

So how can technological sovereignty be supported and enhanced in emerging geographies? It seems to us that there are four essential strategies. The first is to enhance our capacity to use existing technologies more creatively- a lo-fi approach that demonstrates how simple technologies can be

deployed in sophisticated ways. Take the Minitel, France's groundbreaking proto-internet developed by government-owned France Télécom. Initially launched on an experimental basis in Saint-Malo in 1980 and commercially introduced nationwide in 1982, the Minitel quickly became a technological marvel. By 1988, three million Minitel terminals were installed, with 100,000 new units being added monthly. Users could perform tasks that seemed revolutionary at the time: making online purchases, booking train tickets, accessing business information, searching directories, and even chatting in ways that prefigured the World Wide Web. Using relatively simple technology, it provided thousands of services, with hundreds of new ones emerging each month. This approach challenges our current technological paradigm, where we often develop incredibly sophisticated technologies with limited practical applications. For emerging geographies, this offers a crucial lesson: technological sovereignty doesn't have to be about chasing the latest innovation, but can be about creatively leveraging what already exists.

The second strategy centres on developing the ability to innovate and create new technology. Since the 1970s, there has been a great deal of research and discussion on the concept of innovation clusters. The Italian *distretti industriali* – industrial districts –

are often cited as a key example. These are local concentrations of SMEs with specialised roles within a particular industry; they tend to work together intensively and benefit from shared values and norms, as well as local proximity. Dutch expertise in water management is another example of knowledge clustering: water management is as old as the country itself, and now with climate change and rising sea levels, it has evolved into a major growth industry. And then, of course, we have the iconic technology clusters: Silicon Valley above all, as well as Tel Aviv, Cambridge, Hong Kong-Shenzhen, and others, all of which demonstrate how concentrated innovation can drive economic transformation and enhance technological sovereignty. Now in our opinion, emerging geographies should not rush to copy existing models, but should focus instead on creating solutions tailored to their unique contexts. M-Pesa, the mobile banking service launched in Kenya in 2007, provides a perfect example. By enabling users to store and transfer money via mobile phones, M-Pesa has revolutionised financial interactions for underbanked populations across seven African countries. Rather than mimicking traditional banking infrastructure, it grew from a deep understanding of local challenges, transforming economic interactions in the process. This highlights a crucial insight: technological innovation is most impactful when it grows directly from a deep

understanding of a localised problem set. Does it make sense, then, to try and create an abstract Silicon Valley in the middle of Africa? Maybe not. But does it make sense to develop specialised digital payment services in a country where people are underbanked? Yes, definitely – which is why M-Pesa is such a fantastic innovation, whose relevance extends far beyond Africa. At present, it seems to us that many regions in the Global South are stuck in a "cut and paste" approach to technological development, rather than recognising that their unique challenges are also unique opportunities. By addressing these challenges, they can not only benefit local populations, but also contribute transformative solutions to the global technological landscape.

The third strategy is about adapting existing technologies to fit local needs. This might sound similar to the previous point, but it's a little different. It's about taking existing global innovations and reshaping them so that they make sense in a specific context. This has become very difficult because of the globalisation of the digital economy, which has patterned our behaviour, shaped our adoption processes, and caused some technologies to become so pervasive that they cancel the local culture and replace it with something we didn't necessarily need or want in the first place. TikTok is an interesting case in this regard. From a technological perspective, TikTok does some things ex-

tremely well. Unlike Facebook and Instagram, which presupposed that social connections were at the heart of a successful social media app, TikTok based its algorithm on "interest signals." And thanks to TikTok's short-form video format, the platform can gather data on user preferences at an unparalleled speed. Furthermore, TikTok's mobile-first approach and early entry into the short video market gave it a significant advantage over competitors, solidifying its position as a global leader, particularly among young users.

If we take TikTok's success as a premise, it raises an important question: what would it mean to reimagine a technology like TikTok in a different context – for instance, a Swahili context? The critical point here is that this isn't about simply creating a TikTok in Swahili; it's about envisioning a Swahili version that leverages the technological and market breakthroughs of a platform like TikTok to meet the specific needs of that context – and importantly, it's also about considering how to avoid some of the perverse effects of TikTok on the mental health of youth.

Finally, there's the fourth strategy. This is about recognising the recursive nature of technological advancement, particularly in relation to AI. The point is that once you start creating cycles of learning, the datasets grow more sophisticated over time. And the better the data, the higher the quality of the artificial intelligence layers you can build on top. This is why we must be acutely aware of the incentive structures we design around data generation. The goal should be to create recursive learning loops that directly benefit local populations, rather than enabling the global data mining practices of extractive international corporations operating within perversely incentivised market structures. In essence, we want to find ways to break free from these harmful dynamics, so that we can focus on designing positive recursive loops that reinforce the three previous strategies we have discussed.

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Having spent time considering the values that should imbue the man-machine relationship, it's worth asking what such a relationship would look like. What would our relationship with technology become if it genuinely supported our ability to make choices, foster connection, promote human dignity, enhance sovereignty on a personal and national level, and prioritise human and planetary well-being over narrow economic interests? One thing we strongly believe is that such a relationship would be *beautiful* – a word that is often absent in discussions about technology and innovation. While we frequently discuss regulation, ethics, and responsible development, we rarely consider the aesthetic dimension of technological innovation. We would argue, however, that beauty and creativity are not just ornamental qualities, but essential to meaningful technological advancement.

To understand this potential, we can consider the profound legacy of Plato, a philosopher who embodies the synthesis of artistic imagination and intellectual rigour. One of the main reasons for the influence and longevity of Plato's work is its artistic quality – the beauty of his literary style and his masterly use of story and image. His allegory of the cave – where imprisoned people only see shadows cast upon the wall and are unaware of the true nature of reality- is arguably the most influential image in the history of Western philosophy.

Similarly, his fictional history of Atlantis is one of the best-loved stories to come down to us from antiquity. The impact of the story on popular culture has been astonishing, with 400 movies with some relation to Atlantis having been made. Visitors to Aquaventure World in Dubai can go on "an under-the-sea adventure within the lost city of Atlantis", while Legoland in Denmark offers "an exciting trip along the ocean floor to the sunken city of Atlantis"– built entirely out of Lego, of course. It is arguable that virtually every sophisticated world-building narrative- from *The Legend of Zelda* to *The Lord of the Rings* – carries the imaginative DNA of Plato's original conception.

To give another example: it is said that there were two people in ancient Ireland who held power. One was the king who ruled the people, while the other was the poet who moved the people. This simple but thought-provoking story underlines the fact that art and aesthetics possess a unique capacity to inspire, challenge, and fundamentally reshape human perception, which we believe to be of the highest importance for the man-machine relationship. For this reason, it is essential that artists, designers, and creatives emerge from the shadows and begin to play a central role in the development of the man-machine relationship. History offers inspiring precedents who achieved an astonishing blend of artistic and technological innovation,

such as Hisashige Tanaka in Japan, who became famous in his twenties with his autonomous *karakuri* puppet dolls and would later go on to found the Toshiba Corporation. Our relationship with technology, then, should aspire to be not just functional, but beautiful – a collaborative canvas where human creativity and technological potential can coalesce.

Furthermore, we believe that by building a healthy and beautiful relationship with technology, we can contribute meaningfully to peace. However, peace should be understood not just as the absence of war; we view it as a more nuanced and distributed concept. Historically, peace has been seen as a collective effort, often mediated by the state or through international agreements. But what if peace, at its core, could be something that each individual can embody and provoke? Peace could then be about an ongoing engagement with the world- where one is at peace and also actively fosters peace in interactions. This view shifts peace from a passive state to an active force, where individuals take responsibility for promoting peace in their environment, rather than relying solely on state actors to strive towards peace - or even dictate peace. This is why we have called our initiative Pax Technologica. In essence, we think that a beautiful and constructive man-machine relationship can be one of the greatest drivers towards a fundamentally augmented

version of peace that also allows for a different worldview and relationship to nature and ourselves.

This redefined vision of peace is particularly relevant today, as we face increasing complexity in societal systems and the interconnectedness of the global ecosystem. In this context, peace is not just about avoiding conflict but about enabling greater human attainment and flourishing. The Bretton Woods framework, for example, emerged from a pragmatic truce between contrasting ideologies following World War II, but it was a compromised vision of peace, one that ultimately contributed to tensions like the Cold War. The peace it envisioned was a temporary ceasefire, not a lasting state.

In contrast, the peace we envision today is more dynamic and decentralised. It is about balancing the stack of human interactions, where technology can play a crucial role. Rather than being the enemy of peace, technology, particularly AI and exponential tech, can accelerate the interaction between people, fostering a more balanced and empowering relationship. Peace in this sense is not a static, fragile moment but an ongoing, personalised process- a distributed concept of peace where individuals actively shape their sense of responsibility.

Technology, in this vision, is key to enabling this shift. As a tool for empowerment, it can decentralise peace, enabling individuals to take responsibility for maintaining it. The development of a "Pax Technologica" would not be defined by a single powerful state but by a collective of empowered individuals working within their ecosystems, with technology as both a catalyst and a facilitator of peace. This re-envisioned peace, driven by technological progress, represents the possibility of a regenerative, peaceful civilisation where everyone has the tools and agency to contribute.

There is, of course, a great deal more that could be said about peace and decentralisation, and we will delve into these topics in a future essay. For now, we just want to focus on the obvious but essential point that building an improved relationship with technology and taking steps towards a more evolved conception of peace cannot be done in isolation. Humanity must come together and tackle the challenge collectively. It's like being on board a ship caught in a storm. Some have tried to turn their backs on the situation, retreating into their luxury cabins that gyroscopically right themselves, while others are out on deck battling the elements. Our argument is that everyone needs to be out there and step up to become part of the crew. Apathy is not an answer, nor is it realistic to expect the storm to magically pass. Instead, we must all face this challenge

together. As Buckminster Fuller elegantly put it: "There are no passengers on Spaceship Earth. We are all crew." Just as the crew on the ship struggles with the tempestuous seas, we are grappling with our current systems, our environment, our beliefs, and the inexorable rise of exponential technologies. Yet this struggle presents an extraordinary opportunity for growth. Our global challenges – from environmental pressures to economic instability – are not harbingers of inevitable decline. Rather, they hold the potential for transformation, where humanity can unite, embrace change, and emerge stronger. If we view this moment through the lens of opportunity, not fear, we can forge paths towards true prosperity, dignity, and freedom that transcend borders and ideologies. The storm is not a curse, but an invitation to realise our shared potential and build a future that reflects not the worst of humanity, but its best.

There is a beautiful proverb – probably of African origin – that says that "if you want to go fast, go alone; if you want to go far, go together." As we enter the exponential age, it is an important reminder that our collective future depends not on individual brilliance, but on our capacity to collaborate, to imagine together, and to embrace our shared potential for innovation and understanding.

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Jitish Kallat
Tetralemma 1
2023-2024

Acrylique, gesso, laque, fusain, aquarelle et crayon sur toile de lin /
Acrylic, gesso, lacquer, charcoal, watercolor and pencil on linen
203 × 157,5 cm — 80 x 62 in.

The work of Jitish Kallat, one of India's leading contemporary artists, is really distinctive in its exploration of the relationship between art and the natural sciences. His piece Tetralemma 1 evokes the feeling of a naturalist's working table, with its graduated paper and almost architectural structure. The work offers a sense of order, yet it also leaves room for speculation and imagination, with the relationship between objects remaining unclear and open to interpretation.

Kallat's art reflects his deep engagement with consciousness and science. He is a thinker and artist who bridges the realms of speculative biology, science fiction, and analog methods of studying nature. There is an interesting juxtaposition between Kallat's art and our own ambitions: on one hand, a need for structure and process, and on the other, a desire to encourage flexibility in thinking, asking questions rather than providing definitive answers or solutions. His work holds a frame of the possible and imaginary, inviting us to explore what lies beyond conventional understanding.

We are also really attracted to Kallat's fusion of high science with the lo-fi, handmade quality of the craftsman, reflecting a balance between sophisticated scientific inquiry and the tactile, intimate work of the artisan. We think that the art of peacemaking and of developing a healthy man-machine relationship is very much like the artisan's process. It is about working on a case-by-case basis, even if there are broader principles and practices that can be preferred.

Pax Technologica

Pax Technologica is a global initiative dedicated to radically improving the adoption of exponential technologies, particularly artificial intelligence, in emerging geographies of the Global South. We envision a harmonious relationship between humanity and technology, which will enable a future of peace, equity, and cultural enrichment. Recognising that the next wave of global growth will be shaped by regions like the African continent, we focus on empowering local leaders, innovators, and communities to leapfrog outdated systems and harness technology in ways that are ethical, sustainable, and culturally aligned.

Pax Technologica was founded in response to the significant challenges posed by the rise of exponential technologies, particularly artificial intelligence. The troubling events of 2016 – where technology played a critical role in threatening the integrity of the US elections – served as an early warning of developments that may now accelerate rapidly. Yet alongside these challenges lies a landscape of opportunities. While many initiatives focus primarily on mitigating risks, Pax Technologica prioritises identifying opportunities where the benefits of thoughtful and appropriate technology adoption outweigh the risks.

Through initiatives such as the Fellowship Program, Policy Intelligence Unit, strategic salons, and curated dialogues, Pax Technologica brings together diverse voices to co-create solutions for critical challenges in climate, healthcare, education, and food systems. To support and sustain these efforts, we are actively exploring the creation of a dedicated fund in collaboration with diverse partners. Across all our activities, we strive to address the inequities of the digital divide while inspiring a global conversation about technology's role in fostering a more inclusive and balanced world.

Pax Technologica has its roots in creativity, drawing from our backgrounds as designers, artists, urbanists, and storytellers. We believe in the transformative power of narrative and beauty to shape behaviour and drive the changes we seek in the world. As such, Pax Technologica is as much about exploring the narrative and aesthetic dimensions of exponential technology and societal transformation as it is about making tangible change happen on the ground.

Pax Technologica Africa

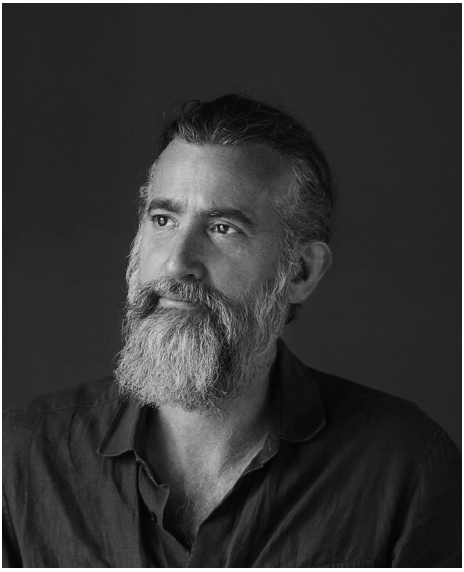
Africa lies at the heart of Pax Technologica's vision of a future where humanity and technology coexist in harmony. We stand on the brink of an African century, in which the continent's rapid transformation will not only reshape Africa but also have a profound impact on the world. With demographic forecasts predicting that by 2050, one in three young people globally will be African, it is crucial to ensure that Africa's demographic dividend is accompanied by a technology dividend. This presents a unique opportunity to adopt exponential technologies in ways that empower individuals and communities, while also contributing to the development of new governance structures and infrastructures that support the well-being of the continent and its natural ecosystems.

Pax Technologica Africa is committed to supporting this transformation by partnering with local leaders, innovators, and institutions that are already doing remarkable work across the continent particularly in policy, venture, and public education. By the summer of 2025, we aim to establish a physical presence in Africa and begin rolling out our Fellowship Program and policy initiatives. Additionally, we will collaborate with our partners to co-develop an African technology adoption summit. Our goal is to support local growth and facilitate international scaling, contributing to a new dynamic in which Africa becomes a leading exporter of technological innovation and problem solving.

Thomas Ermacora

Thomas Ermacora is an award-winning futurist, city architect, creative director, and regenerative civilisation visionary. For the past 25 years he has been a polymath devoted to sustainable design, community wellbeing, and climate intelligence, embedding himself into wicked problems using provocative creativity and crowdsourcing to solve collaboratively.

Founder of Studio Ermacora in 2003 and now Pax Technologica in 2023, he is an impact entrepreneur, international consultant, and has worked with global players as a transformation agent and cultural pioneer.



Ermacora has had a long exposure to exponential tech as the first resident futurist of the XPRIZE, a Futures council member at the World Economic Forum, MIT fellow, Dubai Museum of the Future founding contributor, G7 Italy futurist, co-founder of the Vatican-endorsed Laudato Si' last-mile tech accelerator program, co-founder of the MIT Re-act refugee education program, and founder of the Machines Room, the UK's leading impact fablab.

Ermacora has given keynotes and lectures in over 500 venues in the past decade, illuminating board rooms, government bodies, the UN General Assembly, EU task forces, as well as public festivals and various prestigious university programs. His work is informed by three lenses: the geopolitical forces shaping our world, the trend towards nurturing the self, and a shift towards distributive infrastructures and digital society. Together these consider the burgeoning new civilisational order that all his work moves towards and Pax Technologica is the centrepiece of.

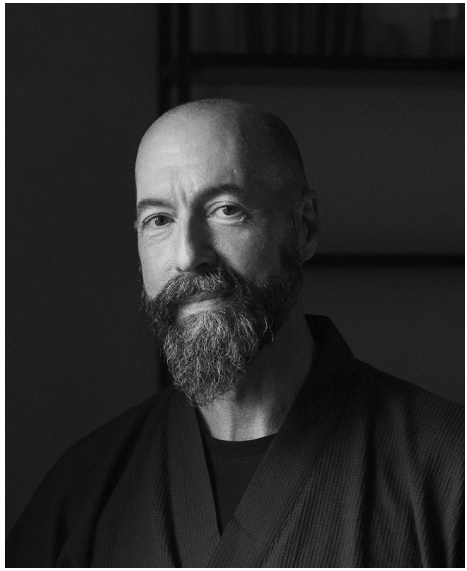
Paul Hughes

Paul Hughes is a systems thinker and designer renowned for his ability to address complex problems and drive impactful work with clarity, creativity, and collaboration.

Hailing from Dublin, where he received his design education, Paul built the foundation for a career grounded in the belief that design bridges vision and reality to enable adaptive decision-making within evolving systems. By holding this complexity, Paul creates frameworks that offer practical alternatives while crafting narratives that drive behaviour and inspire meaningful action.

As the co-founder of Studio Ermacora, Paul blends design, strategy, and impact-driven narratives to develop initiatives that deliver transformative solutions for intricate challenges, with a focus on "finding the simplicity on the other side of complexity." Building on this, his work with Pax Technologica brings this concept to life by navigating the intersection of design, impact, and exponential technologies to address multi-layered issues.

In addition to his work in social action, Paul creates generative spaces for social discourse as an award-winning keynote speaker. For three decades, he has been at the forefront of narrative design, collaborating with leading organisations such as Coca-Cola, 3M, IKEA, LEGO, Canon, and numerous design and technology events, as well as institutions including Yale University, Carnegie Mellon Qatar, and the European Union.



Why Davos?

Pax Technologica is at the World Economic Forum in Davos, January 2025, to engage with African leaders and pioneering innovators on a global stage. This marks the launch of a long-term collaboration with Africa House, working to position Africa at the forefront of global conversations on ethical technology adoption. Furthermore, Pax Technologica is proud to introduce its Fellowship Program and Policy Intelligence Unit, demonstrating its relevance in a fast-moving and complex global scene.

In collaboration with Africa House's Future Forum, Pax Technologica presents a three-day programme exploring Africa's most pressing technological challenges and opportunities. Aligned with Pax Technologica's mission to empower emerging geographies through ethical, human-centred technology, the sessions explore how exponential technologies, particularly AI, foster peace, equity, and sustainability. A key highlight is the partnership with Wired, with Greg Williams, Deputy Global Editorial Director, moderating key discussions to ensure a robust and impactful dialogue.

Pax Technologica Essay Series

The Pax Technologica Essay Series is a curated collection of thought-provoking writings that explore the intersection of exponential technologies, ethics, and cultural development, with a particular focus on emerging geographies. Rooted in our commitment to fostering a more inclusive and equitable technological future, this series brings together diverse perspectives from global thinkers, policymakers, and innovators to address the critical opportunities and challenges of our time. Through these essays, we aim to deepen the conversation on how technologies like AI can be harnessed to promote peace, sustainability, and social progress while ensuring they remain aligned with human values and cultural contexts. By elevating voices from Africa and the Global South, the series serves as both a platform for inspiration and a call to action, offering original insights and frameworks that challenge traditional paradigms and pave the way for ethical, regenerative innovation.

The Kiss of Peace and Justice, Laurent de La Hyre, 1654

Pax Technologica

An initiative to radically improve the adoption of exponential technology for emerging geographies.

STUDIO ERMACØRA