REPORT



Workshop

DIGITAL IDENTITY, GLOBAL CITIZENSHIP AND THE FUTURE OF DEMOCRACY

Alexander von Humboldt Institute for Internet and Society (HIIG) Französische Straße 9, 10117 Berlin 17 May 2018



[...] ἐρωτηθεὶς πόθεν εἴη, "κοσμοπολίτης", ἔφη.

transl. when asked where he came from, *"cosmopolitis"* (citizen of the world), he responded.

Diogenes of Sinope, 4th Century B.C. quoted in: *Diogenes Laertius* "Lives of Eminent Philosophers", 6.63.3

[...] entfernte Weltteile können mit einander friedlich in Verhältnisse kommen, die zuletzt öffentlich gesetzlich werden, und so das menschliche Geschlecht endlich einer weltbürgerlichen Verfassung immer näher bringen können.

transl. distant parts of the world can come into peaceable relations with each other, and these are finally publicly established by law. Thus the human race can gradually be brought closer and closer to a constitution establishing world citizenship.

Immanuel Kant, 18th Century A.D. "Perpetual Peace"





INTRODUCTION

Human rights are universal, at least from a western constitutional perspective. With the increasing instability of states and economies in recent times, resulting in new waves of migration worldwide and the refugee crisis, in particular, human dignity is under threat in various respects. One very basic aspect is the loss of identity and citizenship of the individual frequently caused by the circumstances of migration. The Humanized Internet is an important initiative by Monique Morrow aiming at establishing a system of digital identity open to everybody providing people with a tool via a mobile phone or similar devices where they can populate the records on her name, birthplace and date, education, diplomas etc. real time and choose to share pairwise with organisations and entities at any place in the world. This could help refugees who have lost their documents to prove their identity and skills.

Blockchain technology and strong encryp-

tion seem to be tools for setting up a globally applicable system of digital identity including a logbox for personal data (birth, health, education and diploma, c.v. and references).

This workshop brainstormed around the issues of digital identity, global citizenship and the future of democracy and explored the cornerstones of a possible research project along these lines. A small group of participants and possible future partners of the research project discussed each of the proposed subjects.

The workshop was subdivided into three blocks in which the three segments embedded in the title, Digital Identity, Global Citizenship and Future of Democracy were discussed individually. The first block revolved around the topic of digital identity and experiences and future prospects in the field. On the second and third block, the concept of global citizenship and its implications on the participation in democratic decision-making processes at the global level were in the main focus.

DIGITAL IDENTITY

Digital identity is foundational to other services and business beyond national borders, including e-Government if it is to be made effective. It empowers the individual having control over her data independently of the nationality and place of residence or business. It can help, first of all, to establish citizenship of the person of her state of origin. Without this, the regime of statelessness would apply in certain cases, with the consequence that almost no rights are granted to the person, nor diplomatic protection, etc. In an increasingly mobile world with more and more porous borders it is essential for everybody to dispose of a reliable tool for proving her identity and professional skills. It can be developed to a digital identity wallet facilitating authentication and verification in international trade, but also the development of new data based business models. Digital identity, thus, is foundational to social trust and can facilitate mobility and promote business in the digitalized world.



GLOBAL CITIZENSHIP

Digital identity can be thought beyond. It could become a new basis for recognizing a status of global citizenship to the individual, independently of her nationality, and so allow participating in global processes of democratic discourses and will formation, as needed for the establishment of a system of regulation on global challenges. A normative framework for the operation of a globally free internet and communication system is only one of these challenges. Others are climate change, frameworks for sustainable international trade and global financial markets, the fight against terrorism and organized crime. The Global Risks Report 2018 presented to the Davos World Economic Forum witnesses the challenges ahead. Yet, our present democratic systems at the national and supranational level are unable to meet these challenges which are beyond the reach of national and even supranational politics. Even international cooperation fails to produce effective regulation as is needed. David Held has given a seminal account of the deficiencies of the international system already in the nineties of last century. As Jürgen Habermas explains, the establishment of regulatory power beyond the state, globally, is not a challenge to, but in itself a requirement of democracy.

THE FUTURE OF DEMOCRACY

Digital identity and, based upon it, global citizenship as a door to participation in democratic decision-making processes at the global level does not substitute the citizenship of a state, nor does an institutional setting for global regulation substitute the state. It is additional and complementary to national citizenship and the state, yet it should be possible to offer the establishment of an undisputable identity, registration and the operation of global citizenship independently of a particular nation-state. It is the basis for conceptualizing democratically legitimized global regulation as needed to meet global challenges effectively. Global constitutionalism built upon these insights could become a realistic utopia if coupled with the new opportunities offered by the internet. The question, thus, is to explore technologies making democratic processes effective at the global level. This may include the promotion of global deliberation platforms or an application of Random Sample Voting as developed by David Chaum.



PARTICIPANTS

PROF. DR. DR. INGOLF PERNICE studied law in Marburg, Geneva and Bruges, and some economics in Freiburg. He served as principal administrator at the European Commission's Legal Service before he was appointed Professor for Public, European and International Law at the Johann Wolfgang Goethe-Universität, Frankfurt and, from 1996 to 2015, at the Humboldt-Universität of Berlin. Here, he founded the Walter Hallstein-Institut for European Constitutional Law. He directed the DFG-funded junior research program "Multilevel Constitutionalism – European Experiences and Global Perspectives" from 2006 to 2015. He was visiting professor at Paris II (Panthéon-Assas) in 1998. In 2008/9 he was a LAPA-fellow at the Woodrow Wilson School for Public and International Affaires and Visiting Professor at the Princeton University. He acted as the agent of the German Bundestag in case 2 BvE 2/08 und 2 BvR 1010/08 (Treaty of Lisbon). Since 2013 he is co-director of the Alexander von Humboldt Institute for Internet and Society in Berlin. His main research areas are European constitutional law, privacy and data protection, cyber security law, smart government as well as global constitutionalism and the internet.

MONIQUE MORROW is President and Co-Founder of the Humanized Internet, a non-profit organization focused on providing digital identity for those individuals most underserved, blockchain is certainly a potential mechanism for this billion people challenge, see: https://www.thehumanizedinternet.org. Monique has already advanced Cisco's technology footprint through the ideation and conception of disruptive technologies spanning Artificial Intelligence and Mixed Reality (AI/MR), Blockchain, IoT and M2M services, Semantic Web, Cloud Federation, and the Tactile Internet. Her greatest success has been in infusing a bigpicture perspective that helps engineers and business leaders understand how existing and future technologies align with the needs of business, government, non-profits, and society-focused organizations. To this end, Monique was honored as Business Worldwide Magazine's 2016 Visionary of the Year (Technology, Social Change and Ethics) and 2016 Social Media Champion of the Year. Monique began her journey with Cisco in 2000 as an SP Solutions Engineer in Europe where she helped embed a service provider DNA into the company. In 2001, she became the CTO Consulting Engineer for the service provider segment in Europe and Asia. By 2005, Monique was building a technical leadership team in Hong Kong and directing strategic initiatives for technology globalization for the Office of the CTO. She became Cisco's first Services CTO in 2012, effectively aligning the vision and architecture for services technology across the organization. In this role, Monique helped to prepare Cisco for the transition from hardware to services as the core business, growing the monetary impact of services for software, security, and analytics. Recognized as one of the most influential technology leaders worldwide, Monique has earned honors that include Top 100 CIOs for 2016 (CIO.com), Top Women in Cloud Innovations Award 2016 (CloudNow), Social Media Presence of the Year 2016 (AI Magazine), 10 Women in Networking/Communications You Should Know, Top 10 Influential IT Women in Europe (Think Progress), 2015 Women of M2M/IoT (Connected World Magazine), and 2014 GEM-TECH Award (ITU and UN). She is a tireless advocate for women in technology and engineering, serving on multiple non-profit boards, publishing Internet of Women, Accelerating Culture Change in 2016 and facilitating the launch of the Women in Standardization Expert Group for ITU. Monique was honored by DECA International in April 2017 with the Entrepreneur Spirit Award. Monique was recognized in June 2017 as one of the top 50 EMEA Influencers in Data Center and cloud. In September 2017, the Committee for the Henley & Partners Global Citizen Award chose Monique Morrow and the Humanized Internet as the 2017 laureate. Monique holds an MBA from City University of Seattle (Zurich, Switzerland Program), an MS in Telecommunications Management from Golden Gate University, and a BA in French from San Jose State University. She earned a Graduate Certificate in Information Systems from the University of Southern California and a Diploma of Higher Studies from the University of Paris-Sorbonne.

PROF. DR. BJÖRN SCHEUERMANN studied mathematics, computer science and some physics. PhD in computer science in 2007. After holding professorships at University of Düsseldorf (Mobile Networks), University of Würzburg (Telematics) and University of Bonn (IT Security) settled down at Humboldt-



Universität zu Berlin as a Full Professor of Computer Engineering in 2012. Managing Director of the Institute of Computer Science at Humboldt-Universität and Research Director at HIIG. Main research interests are network protocol design, IT (systems) security and privacy-enhancing technologies.

PHILIP REUCHLIN is an advisor on migration technology, citizenship by investment and blockchain topics. He holds an MBA (INSEAD) and MSc (LSE) in Development Management. He worked 7 years on multilateral environmental and security policy. He was econded by Dutch Ministry of Foreign Affairs to the OSCE as Economic and Environmental Expert (2004-2008), and Personal Assistant to the President of the World Business Council for Sustainable Development. Focal point for Green Economy for the OECD/WBCSD, Coordinator of International Taskforce for Low carbon industrialisation in China for 12th Five Year Plan. Scale-up consultant in Bogota and owner of a family farm.

ANDI GROSS (St-Ursanne/Jura/Switzerland) is a political scientist and historian, head of the Atelier for Direct Democracy in St-Ursanne, since 25 years lecturer on global comparison on direct democracy at many European universities.. As cofounder of the successful initiatives for a Switzerland without a Army (1981-1993) and a Switzerland in the UN (1998-2002) and eurotopia (since 1991), a citizen movement for a european federal constitution, he also has a practical background of Direct Democracy. From 1991 to 2015 Gross was a Swiss MP (elected in Zuerich), from 1995 to 2016 Member of the Council of Europe, in the last eight years leader of the social-democratic group. His last big book "The unfinished Direct Democracy",Texts from 1984-2015 about Switzerland and beyond. www.andigross.ch

KARL STEINACKER (57 years old, German national) studied political sciences and international relations at FU Berlin and international law at the University of Cambridge, UK. For most of his professional life Mr. Steinacker worked for the United Nations: first with UNDP, then with UNRWA and since 1992 with UNHCR. He was seconded for a short stunt to the UN Peace Keeping Mission in Liberia (UNMIL). He also worked for German government agencies in the area of technical co-operation. He spent many years as international civil servant in Africa and the Middle East but also at UNHCR Headquarters in Geneva. He built refugee camps and closed them. He looked for alternatives to camps. He was the first co-chair of the global cluster on Camp Coordination and Camp Management. Today he is tasked by UNHCR to develop a concept of digital identity for displaced populations and to put it in place. He is deputy director of the Division of Programme Management and Support.

PROF. DR. ANTJE WIENER (PhD Carl 1996, MA FUB 1989) has held the Chair of Political Science, especially Global Governance at the University of Hamburg since 2009. She is a By-Fellow of Hughes Hall, Cambridge and has been a Fellow of the Academy of Social Sciences since 2011. Before coming to Hamburg, she has taught in the USA, Canada, US and the UK, where she held Chairs in International Studies at Queen's University Belfast and the University of Bath. In 2015, she was awarded an Opus Magnum Fellowship of the Volkswagen Foundation for research on the 'Constitution and Contestation of Norms in Global International Relations'. She has held numerous visiting fellowships at world leading research institutions, including Stanford, Sussex, the New School, Victoria, Oxford, Cambridge, Toronto, Florence, the LSE and Edinburgh among others. In 2018, she is due to return to the Lauterpacht Centre for International Law at Cambridge as a Visiting Fellow. Her research centres on International Relations theory especially norms research, where her research addresses the normativity-practice nexus. She has served on boards of several leading academic journals and has been co-founding editor of Global Constitutionalism (CUP since 2012) with Jim Tully. Her work has been published widely in peer-reviewed journals including the European Journal of International Relations, the Review of International Studies, the Journal of International Relations and Development, Theory and Society, and the European Journal of International Law. Among her many book publications are three monographs: 'European' Citizenship Practice: Building Institutions of a Non-State (Westview 1998), The Invisible Constitution of Politics: Contested Norms and International Encounters (CUP 2008) and A Theory of Contestation (Springer 2014).

PROF. DR. LARS VIELLECHNER, LL.M. (Yale) studied law at the Humboldt University of Berlin (2012), at the Panthéon-Assas University of Paris II (1999) and in Yale Law School (2004) and is currently associate professor of Constitutional Law, Constitutional Theory, Legal Philosophy and Transnational Law at the



University of Bremen (since 2014). Previously, he worked as academic coordinator of the Graduate College "Constitutionalism Beyond the State" at the Humboldt University of Berlin (2012–2014). He was senior research fellow and lecturer, at the Centre of European Law and Politics and the Collaborative Research Centre "Transformations of the State" at the University of Bremen (2009–2012). He practiced as law clerk at the Higher Regional Court of Hamburg and the Federal Constitutional Court of Germany (2005–2008). Also, he was junior research fellow and lecturer at the Institute of Public Law and Theory of the State at the University of Hamburg (2005–2007). At the Humboldt University of Berlin, he was junior research fellow and lecturer at the Chair of Public Law, Constitutional History and Comparative Law (2004–2005). He was also research assistant, of the Sterling Professor of Law and Political Science in Yale Law School (2003–2004). He was research assistant at the Chair of Public Law, Constitutional History and Comparative Law at the Humboldt University of Berlin (2003–2004).

DANIEL GASTEIGER is co-founder and CEO of Procivis. He has worked in financial services for more than 20 years. Starting out as an FX trader at Credit Suisse, he later joined UBS to work with hedge funds and third-party banks promoting UBS's business-to-business API solutions and Prime Brokerage services. In his last role at UBS, he built up and managed the Office of the Chairman as a Managing Director. His fascination for Blockchain technology led to the decision to start nexussquared, a business platform based in Zurich. There he drove the efforts to enhance the attractiveness of the location for international start-ups and helped new ventures as well as established players to build up business based on the technology.

DR. THORSTEN THIEL has been since December 2017 a postdoc in the research group "Digitization and Democracy" of the Weizenbaum Institute for the networked society and research assistant at the Berlin Centre for Social Sciences (WZB). Previously, he was coordinator of the Leibniz Research Alliance "Crises of a Globalized World" and a research assistant at the Hessian Foundation for Peace and Conflict Research (2013-2017). From 2010-2013 he was postdoc at the Frankfurt Cluster of Excellence "The Formation of Normative Orders", whose associate member he is to this day and in the winter semester 2015/16 he held a substitute professorship for Political Theory and History of Ideas at the University of Trier. He studied at the RWTH Aachen Political Science, Sociology and Economic and Social History. Subsequently, he did his PhD in the context of the Berlin Graduate College "Constitution beyond the state" with a thesis on the democratic discourse in the European Union. During his PhD he completed his fellow research at Stanford University (2006/07) and at University College London (2007), and in 2011 he also spent a few months as a fellow at the Berlin Science Center. Furthermore, he was a member of the advisory board of the German Association for Political Science (DVPW) from 2012 to 2015, followed by a one-year board membership. Currently, he's on the steering committee of the Internet Governance Forum Germany. Together with Christian Volk I publish the series "International Political Theory" in Nomos-Verlag. In 2010, he was one of the founders of the TheorieBlog, which he has co-edited to this day.

NICOLAS K. BLANCHARD is a doctoral candidate (started in 2015) at IRIF under the direction of Nicolas Schabanel in the Distributed Algorithms and Graphs Team. He is also advised by Ted Selker, with whom he works on human usability of security and its applications to voting systems. He is a member of the Random Sample Voting Project, where he is responsible for the development of the RSV simulator and the organization of RSV elections. He's in the process of publishing a book on the use of randomness in politics. He is further part of the POP Special Exploratory Committee, a new political party/platform whose objective is to implement real-time democracy.

DR. JÖRG POHLE studied Law, Computer Science and Political Science at Humboldt-Universität zu Berlin, finished Computer Science with an interdisciplinary diploma on security and security discourse on German voting machines, both mechanical and electronic, and then worked as a researcher on Computer Science and society. His doctoral studies focused on the history and theory of data protection, the individual and societal effects of modern (automated) information processing, and how these issues were addressed by politics, law and engineering. Since 2013, Jörg is managing HIIG's Global Privacy Governance project which researches how issues surrounding privacy, surveillance, cybersecurity and data protection are negotiated on levels beyond the state, e.g in the EU and globally.



EDOARDO CELESTE, LL.M. is PhD candidate at the Sutherland School of Law, University College Dublin (UCD). In January 2018 he joined HIIG as a Fellow in the research area 'Global Constitutionalism'. His PhD thesis investigates the concept of digital constitutionalism, and in particular it analyses the role of the Internet bills of rights in the process of constitutionalisation of the Internet. He started this research during his LLM at King's College London: his dissertation 'Identikit for an Internet Constitution' won the Dickson Poon Prize for the Best Dissertation in IP and Information Law. In 2017 he was awarded the Irish Research Council Government of Ireland Postgraduate Scholarship. Edoardo holds a law degree and a master of specialisation from the University of Rome 'La Sapienza', a master in EU law from the University of Paris II, and an LLM from King's College London. He worked for the ERC-funded Horizon 2020 research project 'Effective Nature Laws', and he was visiting researcher at the Nexa Center for Internet and Society (Polytechnic University of Turin). Edoardo is a member of the editorial board of the UCD Law Review, and tutor of EU constitutional and economic law at UCD Sutherland School of Law. He is currently affiliated with the UCD Centre for Human Rights, and an associate member of the doctoral programme EPEDER (Humboldt-Universität zu Berlin).

KONSTANTINOS TSAKILIOTIS studies law at the Humboldt University in Berlin with a focus on intellectual property. He is especially interested in the interface of human rights law and IT. He wrote a seminar paper on the interpretation of open source licenses under German copyright law, as well as his bachelor thesis on the patentability of data. He is a graduate of Harvard CopyrightX. In 2017, he participated in the Humboldt Internet Law Clinic. In 2018, he coached the HU team at the Price Media Law Moot Court in Oxford. In the same year, he worked as an intern in the Berlin office of Freshfields Bruckhaus Deringer LLP. There, he dealt with Facebook's compliance with the German Network Enforcement Act. Formerly, he worked as a student assistant in the administration of the German Bundestag. At the Humboldt Institute for Internet and Society, he supports as a student assistant the research area "The evolving digital society".



SUMMARY OF THE WORKSHOP

What happens when the entity that issued your identification documents no longer exists? Are encrypted identities the solution to this and further a prerequisite for technologically enabled forms of enhanced participatory democracy, even at a global scale? And, if that is possible, are we all *global citizens*, as Diogenes and Kant claimed to be? On the 17th of May 2018, Monique Morrow (the Humanized Internet) and Prof. Dr. Dr. Ingolf Pernice (Director at the HIIG) invited various stakeholders to deliberate about similar questions regarding digital identity, global citizenship and the future of democracy at an interdisciplinary workshop at the HIIG. The workshop took place within the context of HIIG's bid in the Advocate Europe 2018 competition with the project "Digital Identity, Citizenship and Democracy in Europe". It was structured in three title-corresponding sections.

Digital Identity

As an introduction, Prof. Dr. Dr. Ingolf Pernice (Director at the HIIG) referred to the digital identity as possible stimulator of the citizens' engagement in politics and key-mechanism for establishing democratically legitimated regulation at the global level to effectively address global challenges. Monique Morrow drew attention to the ongoing situation of the refugees not being able to identify themselves without physical documents in the registration process of the local authorities. A digital identity could be the solution to this, she suggested. Using this tool people can store their name, birthplace/date, education etc. and choose to share them pairwise with institutions and entities worldwide. The central notion behind that is that the individual shall control her digital data.

The Digital Identity section was enriched by the technological insights of Prof. Dr. Björn Scheuermann (TU Berlin, Director at the HIIG) concerning the application of blockchain in such a system. He pointed out that the blockchain technology provides for tamper-proof data storage, proof about the existence of a particular data record at a particular point in time in the past and the unrestricted public accessibility of all stored data. While these characteristics may be of an advantage, there are serious concerns with respect to data privacy and data authenticity. Both the restricted data accessibility and the verification of the data authenticity can be enabled by encryption. For this, the management of the decryption keys is essential. However, questions arise with regard hereto: Where and how is the decryption key to be kept? And, why is storing the decryption key better than carrying physical identity documents? Regarding digital signatures, the correct public key has to be found. How can we ensure that the entity claiming to be the signer also owns the digital signature? What happens in cases when entities discover that their private key has been misappropriated in the past?

The discussion that followed evolved around the central issue of trust: How to establish trust without a centralised authority? Prof. Dr. Lars Viellechner (Universität Bremen) asked whether state actors would be willing to entrust private entities with information storage. He went on discussing the nature of the verifying authority and the purpose of the data storage. Dr. Jörg Pohle (HIIG) distinguished between personal and system trust and pointed out that conceptualizing such a system would require defining both *use* and *misuse* cases. He further asserted that an identity management system would be much more flexible than a centralized one. Karl Steinacker (UNHCR) emphasized that digital identities shall be used for inclusion and he referred to the opposite example in Myanmar. He stressed that a legal identity may not be linked to citizenship. Instead it is only necessary to prove one's physical existence. He drew attention to discussions with the EU about assigning trust scores as a basis of identification. The UNHCR distinguishes between own and interpersonal attributes. Accordingly, Edoardo Celeste (UCD-HIIG) suggested an "intermediate risk-based approach" which takes into account the aim of the identification in order



to assess the reliability of the information provided. When Monique Morrow (the Humanized Internet) asked what a digital wallet would look like, the participants discussed and excluded the worrisome examples of China and Facebook. Monique Morrow stressed the importance of gaining control over the own data. Nicolas K. Blanchard (IRIF) warned from the risks of the technology getting compromised pointing at the hacks against biometrics softwares and further stated that continued efforts are needed so that the present blockchain technology be readable in the future. Dr. Thorsten Thiel (Weizenbaum Institute) asserted that a potential technological failure may not be such a detriment to the democracy as a whole. Prof. Dr. Dr. Ingolf Pernice concluded that trust may be contingent on various factors as in the analogue world. Within the context of democratic participation, he asked what level of trust is required for participating at elections.

Transferring E-Identity Solutions to the Public Domain

In the roundtable that followed, experts from different disciplines exchanged their views on the transfer of e-identity solutions to the public domain. First, Philip Reuchlin referred to his experience in the citizenship by investment industry. In this sector consulting firms advise their clients on how to acquire a new citizenship by meeting certain –mostly- financial criteria. Accordingly, he characterized citizenship as potentially unjust since it forms the basis of exclusion as per nationality: "Fate is decided by birth". In his view, nation states are not the ideal institutional entity for solving problems that exceed their borders e.g. climate change. Regarding the public discourse on the internet, he suggested that eponymity is needed. On the distributed systems of data sharing, he expressed the concern that control by private actors may generally disempower citizens and result in a "stateless global society". Philip Reuchlin concluded his contribution by casting doubt on the concept of ius soli in a digitalized world and suggested the idea of a "global identity broker" as a central identity provider that would ensure compatibility with state criteria in forming a supranational identity standard.

Prof. Dr. Dr. Ingolf Pernice observed that such a system may indeed foster mobility, but also facilitates "citizenship shopping". Philip Reuchlin admitted that the current system favours the wealthy, but that it was up to nation states themselves to decide on the criteria of citizenship. As Karl Steinacker sharply put it, "my people cannot reach Malta, while yours end up exactly there". Daniel Gasteiger (Procivis) noted that universal consent cannot be achieved on the suggestion by Philip Reuchlin. Dr. Thorsten Thiel expressed his disapproval of the terminology Reuchlin used. He explained, that the system may be arbitrary, but there is a legitimate democratic justification for discrimination.

Andi Gross (former member of CoE Parliamentary Assembly), the next speaker in the roundtable discussion, asserted that the only way to save democracy is to "transnationalize" it. He elaborated that a federative share of sovereignty between the global, continental, national, regional and communal level is important in order to effectively address challenges on the appropriate level. The present system is rather a consultative one, not a decision-making mechanism. Further, he noted that technology may provide the tools but it cannot substitute democracy itself. Legitimacy is rather the constituent basis of democracy. In that sense, the question is how to mobilize the people to use their digital identities for establishing a transnational democracy.

The discussion focused on the possible technological applications: Shall it be a Gallup vote or a referendum? Karl Steinacker favored the concept of opinion poll as a means to check accountability while referring to his experience in the refugee camps where this tool was successfully used. In contrast to this, Andi Gross expressed concerns with the suggested application in the context of global democracy as opinion polls are agenda-driven and not a result of long deliberations as referenda are. Nicolas K. Blanchard noted that referenda might not work everywhere since they are



usually seen as a confidence vote on the acting government. Answering to Philip Reuchlin who observed that the democracies of this world may be threatening technological progress, Andi Gross firmly stated that technology can rather serve democracy. The technological transition has to be organized in a democratic way. Regarding the debate on fake news and web anonymity, Nicolas K. Blanchard (IRIF) could see a solution only on a cultural level. Prof. Dr. Dr. Ingolf Pernice concluded that technology provides new opportunities for democracy, however a frame is needed, be it constitutional rights or common culture. This must be subject to further discussion in order to address the anxieties of people. He reaffirmed that regulating global matters on national level – "although worthy trying" – is ineffective. Monique Morrow (the Humanized Internet) summarized the discussion by asking what the role of technology should be in fostering transnational democracy.

The last speaker on the roundtable, Karl Steinacker, talked about UNHCR's commitment to digital inclusion especially of refugees, stateless and other forcibly displaced persons. He maintained that providing a legal and digital identity to everybody is an outstanding challenge of the 21^a century. He also noted that it would be counterintuitive to have a non-changeable identity. On the role of blockchain, he admitted to have been surprised by the new possibilities for "self-sovereign identity": "Does it mean that is no longer the state that issues identities?". In the Middle East for example, the local communities issue them. The position of the UNHCR is that the identity system should be transferred to the public domain. "People should have agency over their data". Thereupon, the group discussed examples of coordination in the public domain such as bank-issued common identities, and of trust failure in the central authorities, and he also referred to data leaks. An open question remains how to define and distinguish data agency from data sovereignty.

Global Citizenship

The subject of the third section was global citizenship. Prof. Dr. Dr. Ingolf Pernice introduced this section by addressing the concept throughout the centuries until the digital age. Historically, citizenship referred to the privileges recognized to the inhabitants by the city authorities as opposed to the rural population. Gradually, it evolved to encompass the legal status of people within a nation state as defined by the respective constitution. The constitutional state was founded on the cocitizens' mutual promise for respect for the rule of law, human dignity and fundamental rights. In other words the constitution is the legal expression of their mutual solidarity. Yet, as a result not only of mobility but in particular of communication through internet and social networks across borders societies are merging into a global society, and people's awareness and interest for events, developments and policies in other parts of the world is rising, as well as for common global challenges. Tackling these challenges effectively would not be possible without a constitutional framework for regulation on the global level. It includes defining a global status and responsibilities of the citizens that is based on the inherent dignity of each individual, embracing human diversity regardless of nationalities. Ingolf Pernice finally linked the concept of global citizenship to multilevel constitutionalism meaning the allocation of constitutional power by the individual on authorities established at each level according to the level and type of challenges so that they can be dealt with most effectively.

Prof. Dr. Lars Viellechner responded that dignity instead of citizenship is the appropriate concept on the global level, as citizenship is based on exclusion. Prof Dr. Dr. Ingolf Pernice pictorially answered that "only the residents of the moon would be excluded by global citizenship". Further, he emphasized that public authority on the global level cannot be established without setting limitations on this power. Prof. Dr. Antje Wiener (FAcSS) criticized that this concept ignores that societal conditions are not yet enhanced on the global level, although this is the most important requirement for global citizenship. Ingolf Pernice explained that especially due to the opportunities the internet provides for communication and discourse, in his view, we are moving towards such



conditions. A system of global regulation would have to be built upon nation states and the respect of human diversity as a specific value. The discussion reached at a point the ethics of AI. With a reference to L. Lessig "code is law", Philipp Reuchlin suggested that law would perhaps function better if it was enforced by machines. Ingolf Pernice however replied that, contrary to technical codes law gives humans a choice "to follow the law or not", with all the consequences the law provides for the case of failing compliance.

Prof. Dr. Antje Wiener (FAcSS) provided some insights on the concept of agency in Global International Relations Theory. She discussed the access of various stakeholders to negotiations about norms on national, regional or global level. For this, the question of who has access to this process is a precondition for the *agency of the governed*. The concept of agency is inter alia based on the public philosophy in a sense that if a measure affects all it must be approved by all. In principle the agency of the governed must therefore be accessible to all. In this context, the IT can both serve as a data-source and as a stage for the global interaction between various stakeholders. Prof. Dr. Antje Wiener also clarified that the stakeholders are those expressing their objections to breaches of norms. On the split of citizenship into identity and belonging, she stated that the former is always given while the latter evolves through practice.

The last speaker in this section, Prof. Dr. Lars Viellechner discussed the example of ICANN as a body of global governance. He asserted that this kind of governance suffers a legitimacy deficit that may be cured by the transnational dimension of fundamental rights. In their negative dimension they would protect the liberties of the involved parties from infringements by the ICANN, while in their positive dimension they would provide participation in the allocation of the domain names and prevent arbitrariness. This is reflected upon the practice of dispute resolution. Lars Viellechner considers private international law to be an effective instrument to this end. However, the constitutional import of panelist's decisions is contested from within. He concluded that this type of global governance based on transnational fundamental rights would lead to a deep transformation of democracy on the national level. Established institutions of representative government may be weakened in favor of national, international, supranational courts and dispute resolution providers.

In the discussion part, he compared the example of ICANN to other types of global governance such as FIFA, IOC etc. Edoardo Celeste noted that these transnational bodies succeed in so far as they aim to fill the gaps of power left by nation states or to regulate sectors in which states do not act efficiently. Monique Morrow asked whether the internet will still be relevant as fragmentation already occurs. Karl Steinacker drew the attention of the group to the more urgent issues such as providing identity to those without one. As he put it: "After I have resolved the identity issue, I may then evolve to global citizenship".

Global Constitutionalism and the Future of Democracy

The last section of the workshop evolved around global constitutionalism and the future of democracy. Daniel Gasteiger talked about the effective protection of human rights and the perspectives of e-democracy. He stressed that without identity an estimated 1.1 billion people are deprived of access to universal human rights. In his opinion, the issuing of legal identities shall not be exclusively vested upon governments as they lack the resources to guarantee universal reach, and some of them pursue discriminatory policies against certain communities. Blockchain-based identity is rather the solution as it enables the decentralized issuance of legal identities by various trusted actors. He further referred to Procivis' project cooperation on eID+ with the government of the Canton of Schaffhausen in Switzerland. Referring to e-voting, he pointed out that digital technology has the potential to enhance democratic participation at a reduced cost, whereas a secure



technological infrastructure has to guarantee the "one-person, one-vote rule" and the anonymity of the voters.

The subsequent discussion evolved on how to guarantee system security. Jörg Pohle observed that the law solves unsolved technological problems, and he gave a macabre illustration: "No one can prevent your surgeon from killing you. The law prohibits this". On data security, Philip Reuchlin suggested that only the necessary data be disclosed in order to prevent the scale of the damage. Jörg Pohle added in this context the example of attribute-based credentials. Nicolas K. Blanchard noted that the question of what is minimum data and who determines this must not be neglected.

Dr. Thorsten Thiel contributed some considerations on the actual challenges the democracy faces, the interface with digitalization and how the concept of identity/citizenship and democracy can be enhanced through digital identity. As challenges he considered inter alia political developments such as immigration, the erosion of trust towards the established regimes and the general crisis of the democracy due to its slow decision-making mechanisms, the non-accountability of the elites and the growing skepticism towards elections. He noted, that from the early utopian expectation regarding internet's role in fostering democracy that debate has moved to combating the dangers brought by fake news, eco-chambers etc. With regard to the discourse on citizenship/identity, he distinguished three main aspects: the issue of identification regarding the selection of those able to participate actively, be it voter registers or social security systems, identity in the sense of belonging as a condition for building trust, and thirdly, the "identity à citizenship" giving the concept of citizenship a more active dimension connected to collective action. In the discussion afterwards, he considered the concept of global citizenship a philosophical question, where the internet is not necessarily an issue. Prof. Dr. Dr. Ingolf Pernice responded that this project is not about resolving the problem of democracy. The idea would rather be that if people are registered with a digital identity, regardless of their nationality, they could more easily establish and participate in democratic processes at the global level. Karl Steinacker noted that regulatory powers should work at a faster pace to address urgent present issues.

The last contribution in the workshop by Nicolas K. Blanchard focused on explaining the system of random-sample-voting: It functions by sampling a smaller set of people from the global population that is verifiably representative. It then provides them with a secure voting interface through which they can vote on a single YES/NO issue. After the voting period, the election data is automatically updated and can be freely audited by any agent or group of citizens. The system mathematically guarantees multiple properties under reasonable assumptions. The voting happens online using numbers from secure ballots distributed to the sampled group, and can last an extended period of time. According to him, the system is secure and end-to-end verifiable, with voters being able to check that their vote was counted correctly and that the tally is accurate. The idea behind that is that the reduced number of voters may allocate more responsibility on them and motivate them to make a well-informed decision. Apart from that, the influence of advertising campaigns would be lower due to the equally lower investment return: less, better-informed and harder-to-manipulate voters.

In the discussion, Nicolas K. Blanchard admitted that the suggested system may be inherently unfair and illegitimate, it can be unbiased though related to the present ones. On the e-voting system, he referred to that practiced in Estonia by saying: "People who were auditing it promptly advised against it." Most of the participants expressed some concerns about the proposed system. Prof. Dr. Lars Viellechner stated, "what counts in a democracy is to be concerned". Andi Gross reiterated that "freedom is not to delegate (ref. to RSV), it is to decide for yourself". Daniel Gasteiger suggested that a digital identity system is to be established instead in order to allow all people to vote. Dr. Thorsten Thiel considered this proposal as too narrow an idea of democracy.



Conclusion

In conclusion, Prof. Dr. Dr. Ingolf Pernice asked for the next steps ahead. The participants were in general positive about publishing a book on the subjects discussed. The form and its content varied from "open access" to "an audiobook" and to "a series of articles". Philip Reuchlin suggested to be more practical and develop a system that can be applied in the field. Following this idea Ingolf Pernice referred to the attempt of designing a tool to enhance democracy for EU citizens, as a group of researchers already proposed to undertake. This would imply that the technologies for digital identity and RSV (e-voting) would be available for use and further development. Nicolas K. Blanchard signalled that this seemed to be possible from the point of view also of David Chaum. Similarly, Daniel Gasteiger had already indicated that his technology on digital identity could be used for this project. Monique Morrow finally reminded the group of the participation of HIIG along with others in the Advocate Europe project.

Summary of introductions and discussions by Konstantinos Tsakiliotis



