RELIGION AND INNOVATION

CALIBRATING RESEARCH APPROACHES AND SUGGESTING STRATEGIES FOR A FRUITFUL INTERACTION

Position Paper of the Center for Religious Studies
Fondazione Bruno Kessler
RELIGION AND INNOVATION

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1 WHY RELIGION AND INNOVATION?

We live in a time of deep concern for the future of humankind and the biosphere. As we at the Center for Religious Studies of Fondazione Bruno Kessler have learnt from our participation in the G20 Interfaith Forum¹, religion and religions have a great responsibility towards sustainable development. While freedom of religion or belief is an innate and inalienable right, to be protected no matter the public policy priorities of the relevant time and place, this fundamental freedom is particularly precious in the current global situation: freedom of individual believers and faith communities is a necessary condition for fulfilling our historical responsibility for future generations and, more specifically, for facilitating the pursuit of the United Nations 2030 Agenda for Sustainable Development².

¹ See the website of the G20 Interfaith Forum: https://www.g20interfaith.org/

² See the UN Sustainable Development Agenda at https://www.un.org/sustainabledevelopment/development-agenda/
Innovation is crucial in such endeavour. No meaningful alliance between governments and the private sector worldwide is conceivable if innovation is not properly understood and engaged with. This is true for both innovation in science and technology\(^3\) and social innovation\(^4\). Religion is no less crucial. The shaping of individual and collective thoughts and actions conducive to sustainable development ultimately depends on some form of religion or belief, spirituality or faith, worldview, ethics and value system. Religion or belief communities and traditions also have a unique responsibility, as do those who are in charge of designing and implementing public policies impacting on religion. In the face of the broad and deep discussion about innovation and sustainable development, and more recently also on religious and interreligious commitment to sustainable development, we acknowledge the lack of systematic reflection on, and engagement with, the interaction of religion and innovation. Hence the decision in 2016 to focus our Center – for more than 40 years at the forefront of research on religious change – on the mission of studying and improving the interaction between religion and innovation. This position paper summarises how we understand the issues at stake and how we propose to address the gap, for the sake of a true contribution of religion to sustainable development.

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\(^4\) On the role of social innovation for sustainable development see the UN document “New innovation approaches to support the implementation of the Sustainable Development Goals”, https://unctad.org/en/PublicationsLibrary/dtistict2017d4_en.pdf
In 2016 the Center for Religious Studies of the Fondazione Bruno Kessler (FBK-ISR) adopted its mission of advancing the critical understanding of the multi-faceted relationship between religion and innovation and improving the interaction of religion and innovation in contemporary societies. Based on a broad understanding of innovation, covering social and cultural innovation as well as innovation in science and technology, FBK-ISR's mission identifies three dimensions of the relation between religion and innovation along with corresponding questions for action-research:

**INNOVATION IN RELIGION**
How is innovation being understood, experienced and practised within religious traditions and communities of faith or belief?

**RELIGION IN INNOVATION**
How do religious traditions and communities of faith or belief contribute to innovation in the areas of culture and society, science and technology, politics and the law?

**RELIGION OF INNOVATION**
Has the vocabulary of innovation itself become a rhetorical vehicle for quasi-religious discourses? Has innovation itself turned into a belief system and become a sort of religion?

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The mission adopted in 2016 is rooted in the history and vocation of the Center. Founded in 1975 as a research institution not aligned with any specific religion or belief, over the past 43 years FBK-ISR has been a platform for independent, interdisciplinary and international inquiry into the phenomenon of religion across the breadth of its articulations. Covering expertise in the fields of Philosophy, Sociology, Theology, Anthropology, History, Ethics, and the Law, FBK-ISR is a node in a wide-ranging network of multidisciplinary partnerships with national and international research institutions. Particular effort is dedicated to establishing a sustained dialogue between the humanities and social sciences on the one hand, technological research and development on the other. In this regard, our Center is in the privileged position of belonging to an institutional setting that promotes the development of joint projects with more than 300 researchers working on artificial intelligence and digital societies, augmented reality and technologies of vision, fog and quantum computing, next generation internet and cyber-security. Consequently, and in accordance with the vision of Fondazione Bruno Kessler, the Center also pursues the aim of knowledge transfer, in order to actively contribute to social and economic growth.

In 2016-2018, FBK-ISR’s projects engaged with religion and innovation along four research lines: Conflicts; Spirituality and Life-styles; Texts, Doctrines, and Traditions; Values, Science, and Technology. In 2019-2021, our projects will predominantly engage with the following areas of application: Inclusive and Safe Societies; Ethics and Rights; Sustainable Development; Time-Space Mobility. Some of the projects fall into the category of basic (theoretical, conceptual, and empirical) research, others pursue an action research methodology. Although traditionally applied to other fields, action-research approaches can be fruitfully used in religious studies to combine the identification of crucial problems with the promotion of change in the multiple interactions between...
religious communities and secular groups, institutions and society at large. In this vein, FBK-ISR collaborates with public administrations in the fields of social policy and education, with profit and non-profit private actors, and with local and global religious communities, in an effort to create social impact through stakeholder involvement in reflective and participated processes of change. A recurring focus of FBK-ISR’s action research projects is the role of new technologies in processes of change. In this regard, the exploration of the potentials of technology-assisted and technology-enabled social and cultural innovation has led to a close collaboration with FBK’s Center for Information and Communication Technology (FBK-ICT)⁸.

In 2018 the Center organised and hosted a series of 10 multidisciplinary workshops, lectures, and conferences on the overarching topic of religion and innovation, initiating debates and exchanges with disciplines as diverse as Computer Science, Sociology, Philosophy, Architecture, Game Development, Semiotics, Media Studies, and Legal Studies⁹. The workshops and lectures consolidated and developed the work done in 2016 and 2017, which included projects on religious disagreement, global faith-based health systems, religion and violence, hate speech and prevention of religious intolerance in education, as well as debates at our Center in Trento with key international scholars such as the theologians Harvey Cox and Jürgen Moltmann, historian of Christianity Alberto Melloni, historian of Islam Gudrun Krämer, philosophers Akeel Bilgrami and Richard Feldman, sociologist Hartmut Rosa, and the then UN Special rapporteur on freedom of religion or belief Heiner Bielefeldt.

Drawing upon our past and ongoing research projects and on three years’ worth of multidisciplinary dialogue, this position paper presents some of the more general – and still intermediate – lessons we have learnt with regard to the study of the relationship between religion and innovation and the actions that can enhance their

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⁸ See the website of FBK-ICT: https://ict.fbk.eu/

interaction. Throughout the paper, we use the triangular model of religion and innovation (see p. 7), as our guiding conceptual framework. The value of this model is twofold. On the one hand, it identifies three distinct dimensions of the complex relationship between religion and innovation. On the other hand, it emphasises the interconnectedness and mutual influence of those three dimensions, thus offering the basis for an understanding of the field that is at the same time internally differentiated and comprehensive. Our intention is to involve researchers, media professionals, entrepreneurs, religious leaders, decision makers, and social innovation practitioners in a reflective process that addresses the increasing relevance of religion and religious diversity for key processes of change, present and future.
Research in religion and innovation requires particular attention to the dynamic texture of religious communities and traditions and an understanding of religion as neither intrinsically nor de facto always opposed to change (Yerxa 2015). To the extent that the notion of innovation is connected to that of historical change, it offers an epistemological lens for exploring the role religions have played in crucial processes of social and political transformation. Today, the dynamicity of the religious sphere is particularly visible in the transformative impact of religious diversity on contemporary societies. Indeed, today's 'disruptive' visibility and renewed agency of different religious groups in the public sphere, and their compresence with secular actors, is provoking tensions and struggles, but also an increase in reflexivity and awareness, that induce new and multiple configurations of modernities (Rosati - Stoeckl eds. 2012). This said, it seems of utmost importance to us to avoid reductive conceptions with regard to both religion – including religiosity – and innovation\(^\text{10}\).

\section*{3.1 RELIGION}

We adopt a broad, non-essentialist, and inclusive understanding of religion, which leaves room for taking new forms of faith, belief, and spirituality, as well as hybridisations of religious traditions and practices, into account. At a theoretical level, then, we take religions to be social and cultural constructs, constituted by a dynamic and variable combination of different elements and their roles in the lives of individuals and groups – including practices, beliefs, precepts, community bonds, habits, attitudes, and imageries, as well as institutions and doctrines (in the case of institutionalised religions). Moreover, we consider the religious sphere to be characterised by multi-dimensional diversity: diversity between reli-

\(^{10}\) An example of such reductive understandings of religion and innovation can be found in Bénabou et al. 2015, who operationalise the notion of the religiosity of a country in terms of self-ascribed religiosity or non-religiosity and the notion of the innovativeness of a country in terms of patents per capita. For a sustained discussion of different models of innovation see Godin 2017.
gions, diversity within specific religions, and diversity between religious and non-religious forms of belief and practical commitment. Accordingly, our work on religious diversity and on freedom of religion or belief takes into account theistic, non-theistic and atheistic beliefs.\(^{11}\)

On the one hand, the non-essentialist and dynamic understanding of religion sketched in the preceding paragraph allows us to take into account that attempts at providing a universally acceptable definition of religion are open to historical and post-colonial criticism as merely expressions of a Western and Christian project (Asad 1993; Smith 1982; Ferlan - Ventura eds. 2018). On the other hand, it is substantial enough to capture the significance of the category of religion in the self-understandings of communities of faith or belief, in their practices, and in how they relate to secular institutions and actors.\(^{12}\)

Against this backdrop, research and action in religion and innovation require constant attention to how different religious communities and community leaders traditionally and currently speak about, and experience, change and innovation:

- Do the different religious groups make use of the notion of innovation? If so, which meanings do they associate with this concept?
- Are specific evaluative stances towards scientific, technological, social, political, or economic change inscribed into the doctrinal part of a given religious tradition?
- If so, how do these stances manifest themselves in the dimension of ‘lived religion’?

\(^{11}\) In this regard, see the 2014 OSCE/ODIHR document “Guidelines on the Legal Personality of Religious or Belief Communities” (https://www.osce.org/odihr/139046?download=true), pp. 9-10: “There is a great diversity of religions and beliefs. The freedom of religion or belief is therefore not limited in its application to traditional religions and beliefs or to religions and beliefs with institutional characteristics or practices analogous to those traditional views. The freedom of religion or belief protects theistic, non-theistic and atheistic beliefs, as well as the right not to profess any religion or belief”.

\(^{12}\) While being aware of the adoption of the expression “religious or belief communities” in international documents (the OSCE/ODIHR document quoted in the preceding footnote is a case in point), in this paper we use interchangeably expressions such as “religious communities”, “religious groups”, “communities of faith or belief”, and “faith-based organizations”.
In this regard, it is crucial to study the set of cultures and social representations that guide religious actors’ attitudes towards (and within) innovation processes and to heed the differences when attempting to generalise from specific findings. Given the fact of religious diversity, statements to the effect that there is an essential relation between religion and innovation, be it negative or positive, should be regarded with scepticism.

3.2 INNOVATION

Regarding our take on the notion of innovation, our starting point is the observation that “innovation” semantically intersects both with value-neutral concepts such as “change” or “transformation” and with the decidedly normative idea of progress. So, why focus on innovation rather than on change, transformation or progress? Why commit a research centre that studies religion, not to the investigation of the relationship between religion and transformation in contemporary societies, but rather to research and action on the encounter of religion and innovation?

The answer may begin with the observation that societal agents today tend to use the term “innovation” rather than “progress” or “transformation” to express their normative commitment to initiatives that they deem to constitute change for the better. One reason for this may be the fact that the term “progress” has heavy metaphysical connotations that stem from grand philosophical and political narratives, which, in the eyes of many, today have lost their credibility. “Change” and “transformation”, on the other hand, express merely descriptive concepts. The term “innovation” may thus provide agents with a middle ground between the heavily normative notion of progress and the merely descriptive concepts of change and transformation. It has a more agential, pragmatic, and contextual flavour than “progress” in that innovation is usually understood as a situated process of individual or collective creativity prompted by a specific problem or need. At the same time, and as opposed

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13 Compare the research-mission statement of the recently established centre “Religion and Transformation in Contemporary Society” at University of Vienna: https://www.religionandtransformation.at/en/
to the terms “change” and “transformation”, it can serve to indicate normative commitment.

In today’s multifarious uses of the term “innovation” there is a pronounced tendency towards attributing value to novelty by default. What is new is often regarded as better per se, and this bias puts the burden of justification on those who, for whatever reasons, want to resist change and leave things as they are in a given context. It is by no means obvious, however, why such a default value should be attributed to newness. It would seem that the question of whether or not there is a need for innovation has to be addressed and answered on a case-by-case basis rather than through the attribution of default value to novelty.

Indeed, the term “innovation” is commonly used today to express a positive attitude towards a given project, process or result X. Characterising X as innovative usually implies an attitude of appreciation or endorsement of X, i.e., an evaluation of X as something good, desirable, and useful – as something that improves upon a previous state of affairs. This has not always been so. In fact, it was only over the course of the twentieth century that “innovation” has become a success word – or, as Godin and Vinck (2017: 4) put it, “a word of honour”. Just as the concept of religion, the concept of innovation is a both diachronically and synchronically mutable category whose core meanings and connotations shift over time and across cultural, social, and political contexts. This regards both conceptualisations of what innovation consists in and attitudes regarding the goodness or badness of innovation. Understanding a given innovation discourse with regard to some X, thus, always requires close attention to the fol-

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14 In this regard, there are close parallels between the notion of innovation and the notion of (human) enhancement. Cf. Chadwick 2008 for the relevant distinction between normative and non-normative readings of the term “enhancement”. On the widespread “pro-innovation bias” see already Rogers 1962, as well as the discussion in Godin – Vinck 2017.

15 For a detailed historical reconstruction of the semantic shift from primarily negative to primarily positive normative connotations of the word “innovation” over the centuries cf. Godin 2015.
lowing questions: by whom, on what grounds, and with regard to which goals is X characterised as an innovation?

A project, process, or result, then, cannot be said to be innovative *tout court*. It can only be said to be so relative to a specific context of reference. Methodologically speaking, the analysis of religion-and-innovation discourses has to begin with a description of the context of reference. The context analysis will have to include, at least, (a) the description of a state of affairs $S$ that constitutes the point of departure of an alleged innovation process, and (b) a reconstruction of the presupposed set of values that determine whether or not a given project, activity or result is to be considered an improvement over $S$. The relevant set of values can be expected to include normative (ethical, religious, aesthetic) attitudes and, ultimately, ideas about how we want to live (ideas about social and economic justice, for instance).

A final point to include in these remarks on the concept of innovation concerns the fact that the term “innovation” expresses, in an important sense, an ex-post concept: time is needed to tell whether or not a given innovation attempt is ultimately successful, i.e., whether or not it indeed results in an innovation. Research on religion and innovation thus requires a temporal and diachronic perspective.

### 3.3 Normativity

Given the preceding considerations, it becomes clear that unhedged uses of the words “innovation” and “innovative” (i.e., uses which do not make their relevant normative and descriptive assumptions explicit) presuppose that the speaker (the proponent of some innovation-claim) and the hearer (the audience, addressees and potential evaluators of the innovation-claim) share a repertoire of relevant norms, values, and goals – a presupposition that may fail to be fulfilled and prove to be false. What may be considered innovative in one context can fail to be innovative in a different one.

One central aspect, then, of advancing the critical understanding of today’s religion-and-innovation discourses in various research-related, political, technological, and economic contexts has to consist in the analysis of the (often tacit) normative and conceptual underpinnings of innovation-talk. In this regard, we
take it that research needs to pay particular attention to the following questions:

• How to understand the conceptual history of today’s innovation discourses? How and why did “innovation” evolve into a key-concept of contemporary narratives and political discourses concerning research, technology development, social, economic, and environmental sustainability?

• What are the value assumptions that form the backdrop of specific conceptions of the relationship between innovation and religion in the fields of social organisation, politics and the law, culture, technology, and research?

• What are the different value commitments that are responsible for moral, political, and religious disagreements regarding concrete social or technological innovation attempts?

Fine-grained and differentiated analyses of the contexts of reference of religion-and-innovation discourses, both with regard to their normative and non-normative aspects, clearly require a multidisciplinary – and, ideally, interdisciplinary – effort. Arguably, mixed-methods research approaches that combine qualitative ethnography, case studies, and conceptual and normative reflection with quantitative data collection and analysis are best suited to capture the complexity of the relevant phenomena. Depending on the cases under consideration, such multi- and interdisciplinary efforts may involve, for instance, empirical and theoretical social scientists (including religious-studies scholars), historians, philosophers working in moral, ethical, and political theory, legal scholars, economists, computer scientists, and scholars in science and technology studies (a field today often referred to as “innovation studies”, cf. Fagerberg - Martin - Andersen eds. 2014; Godin 2014).
Based on the preceding conceptual and methodological considerations, in this section we focus on the two areas of the broad field of religion and innovation that have been at the centre of FBK-ISR’s action research since 2016: (1) religion, social innovation, and cultural innovation, (2) religion and innovation in science and technology. We consider these two areas to be closely interrelated.
4.1 RELIGION, SOCIAL INNOVATION, AND CULTURAL INNOVATION

4.1.1 Social and cultural innovation

As in innovation discourses in general, also in the specific case of social innovation a wide spectrum of meanings and uses of the notion can be observed. This holds for political and professional discourses and practices as well as for scholarly discourses in different disciplines and research fields (Moulaert et al. 2017). Our working definition of "social innovation" covers processes that (a) develop and implement new solutions to societal challenges or new responses to (unmet) societal needs, and (b) result in an improvement, in terms of societal benefit, over the status ex ante, typically (but not necessarily) through a bottom-up approach that actively involves the relevant communities and stakeholder groups.

Throughout the 2018 Religion and Innovation workshop and lecture series, FBK-ISR’s researchers have been in dialogue with scholars advocating an understanding of social innovation as collective action. Social agents, and specifically the stakeholders or users, should be considered in their active role in shaping innovation processes, instead of being considered ‘the last link of the chain’, passive consumers or beneficiaries. The users ultimately determine if, and when, an innovation really occurs. Viewed from this perspective, social innovation can be best understood as aiming at contrasting social segregation and poverty by empowering marginal social groups and by transforming power relationships (Oosterlinck et al. 2013). Micro-social capital, civic capacity, networks of trust, and collective leadership are key concepts of such inclusive innovation and ‘territorial development approaches’, enabling the valorisation of social innovation as a driver of social change, as an emancipatory force and as a means for safeguarding human dignity16.

The collective construal of social innovation – which combines the participation of both users and providers in the overall process – im-

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plies the context-relativity of social innovation. The latter, in turn, requires researchers to adopt a strict focus on the analysis of cases and examples. Moreover, such an understanding of social innovation in terms of collective action calls into question the linear “from the lab to the market” model of innovation. Though still widely accepted, this model has clear limitations because it focuses exclusively on a monetary conception of value.

In parallel, the workshop and lecture series explored the idea of cultural innovation, which is closely related to that of social innovation. We use the term “cultural innovation” to refer to novel developments in cultural heritage and in its management, as well as to broader issues pertaining to intercultural and interreligious exchange and co-creation. As some scholars have argued, culture and art (to be intended not only as patrimonies and inherited sets of beliefs, practices or objects but also as ‘trial and error’ processes) potentially offer non-authoritarian and self-regulated fields for interaction, reflexivity and change. Cultural innovation can thus be understood as the outcome of complex co-creation processes that involve knowledge flows across the social environment. Moreover, similar to social innovation (understood along the lines sketched above) cultural innovation may promote the resilience of culturally diverse identities within societies. It takes a critical stance towards inequalities in the distribution of knowledge by leveraging the idea of a participated production of knowledge (Pozzo - Virgili 2017). As opposed to economic and political innovation discourses, which are often based on imaginaries and rhetorics that aim to present the values of specific cultural or interest groups as neutral and objective, these approaches openly pursue ideals of social justice and explicitly construe innovation in terms of moral progress (Moulaert et al. eds. 2017).

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17 Originally introduced to refer to a management and product development strategy in business contexts, we here use the term “co-creation” in a broader sense to refer to any process of intercultural and interreligious creation of value.

18 Lecture Culture is the Keyword, held by Doris Summer (Harvard University) on 28 May 2018 at the Fondazione Bruno Kessler (FBK-IRVAPP - Research Institute for the Evaluation of Public Policies), Trento.
In light of our triangular model *innovation in religion - religion in innovation - religion of innovation* we suggest that research on the interactions between religion, social, and cultural innovation should primarily focus on the first and the second dimension, i.e., on the role of religious actors and communities within social and/or cultural innovation processes (*religion in innovation*) and on the transformative impact of social and/or cultural innovation within religious communities (*innovation in religion*).

### 4.1.2 Religious groups and their agency in social and cultural innovation

Given their social and cultural nature, it is clear that religious groups are directly affected by processes of social and cultural change, today as they have always been in the past. Religions are constantly engaged in reformulating their traditions (beliefs, practices, and doctrines) in dialogue with their historical, geographical, and social settings. In some cases, these negotiations are steered by the interpretive and discursive authority of religious institutions and/or communities. In others they take the form of more participatory and non-hierarchical processes. To what extent, however, is it justified to interpret social and cultural changes involving the sphere of religion in terms of innovation?

Following the interpretation of social innovation as a collective action proposed above, a broad indication to better disclose the relationship between religion and social and cultural innovation is to focus on religious groups’ agency in its different grades and forms, i.e., on the dimension of religion in innovation. In this perspective,

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20 A particularly interesting field of observation in this regard is the emergence of a European Islam, one of the topics explored in the 2018 FBK-ISR workshop and lecture series.
when considering communities of faith or belief as stakeholders in social and/or cultural innovation processes, it is crucial to study the uses (or to reconstruct the ‘history of the uses’) made by the different religious groups of the new initiatives under scrutiny, in order to understand if these initiatives really produce innovative changes in a certain context or dimension of social life. In parallel, and still as a consequence of taking into account the role of agency in innovation, social and specifically religious/spiritual needs, which are extremely variable not just between groups but even over the life-time of individuals and collectivities, need to be analysed. In this regard, it is particularly challenging to study cultural and social innovation initiatives that aim to strengthen the resilience of specific religious traditions and identities.

Still in terms of religious agency in innovation, research on religion and socio-cultural innovation needs to address social and/or cultural innovation initiatives that are driven by religious communities and/or motivated by religious beliefs and values – distinguishing between initiatives that rely on medium or long term planning and those which respond to pressing social needs in the manner of ‘cop ing strategies’. Such research is crucial if we consider the current increase of religious activism in response to environmental disasters or social and humanitarian urgencies caused by migration, radicalisation, Islamophobia or other forms of religiously motivated hatred (Cohen 2018).

In this regard, it is critical to analyse the different ways in which the private and the third sectors, which are the organisational fields in which religious groups have particular agency, interact with governments and state institutions. Public policy support of innovation initiatives originating in the private and the third sectors is important for strengthening the impact of those initiatives on their target

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21 This implies the requirement to base the research on an accurate theoretical approach to the notion of religious/spiritual need, which is often used in a generic manner.

22 For a recent study of Catholic social innovation initiatives related to migration, for instance, see the FADICA report “Catholic Social Innovation in Today’s Global Refugee Crisis” at https://www.fadica.org/images/resources/FADICA_Exec_Sum_CSI_Refugee_Migration_%204_27_18.pdf.
groups. More generally speaking, the state can be a key facilitator and driver of innovation processes. This point is convincingly argued by the economist and innovation scholar Mariana Mazzucato (2014 - 2018). However, while Mazzucato develops her argument with a focus on technological and economic innovation, we take it that her case for an active involvement of the state in innovation processes can be applied to the domains of social and cultural innovation as well. That is, we consider the involvement and collaboration of the state, public administrations, and intergovernmental organisations to be indispensable for ensuring the effective implementation bottom-up social and cultural innovation processes, in particular with regard to facilitating and promoting the active participation of civil society in decision-making processes and governance (cf. the idea of bottom-linked initiatives proposed by Mouleart et al. 2017).

While the foregoing concerns the potential support that policies and laws can provide to social and cultural innovation initiatives, it is also crucial to investigate the ways in which social and cultural change can solicit innovation within politics and the law. An emblematic field of study in this regard is how international human-rights law and other legal approaches to guaranteeing the right to freedom of religion or belief may be under pressure to innovate in order to deal with religious diversity (Ventura 2013; 2014; Bielefeldt 2016; Annichchino 2018a).

FBK-ISR takes public engagement in general (Rask et al. 2018) as well as religious and interreligious engagement in a “virtuous cir-

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23 We take the work done by the following recent or ongoing international research projects to be particularly relevant in this respect: RELIGARE (https://cordis.europa.eu/project/rcn/94078/factsheet/en), IMPACT (https://www.crs.uu.se/about-impact/), ReligioWest (https://www.eui.eu/DepartmentsAndCentres/RobertSchumanCentre/Research/ArchivesInstitutionsGovernanceDemocracy/ReligioWest/ReligioWest), and GRASSROOTSMOBILISE (http://grassrootsmobilise.eu/).

24 FBK-ISR was a partner in the research consortium supporting the European Parliament Intergroup on Freedom of Religion or Belief and Religious Tolerance in drafting its annual report for 2017. The consortium was led by the University of Luxembourg and involved researchers from the University of Cambridge and FBK-ISR. The report and research annex are available at http://www.religiousfreedom.eu/2018/09/04/2018-report-and-annex/
cle” of social innovation to be pivotal for reflective democracies and the protection of human and religious rights. As suggested by our triangular model of religion and innovation (see the box on p. 7) and by our experience in action-research on religion and social innovation, collaboration with religious actors and leaders is key not only to enabling a multidimensional understanding of the role religion may play in innovation, but also to promoting the reflexivity of religious groups concerning their own views and practices. Such an increase in reflexivity may then lead to transformations within religious communities that can be understood in terms of innovation in religion.

As far as the active role of religions in cultural innovation through co-creation is concerned, we consider the field of interreligious dialogue to be a central area of study. Initiatives that work at a grassroots level to promote a better understanding of and knowledge about different religious traditions and/or to foster good co-existence are a good case in point (Griera - Giorda - Fabretti 2018). Moreover, against the backdrop of the renewed interest in the material relationship between religion and space, and the challenges posed by religious diversity, it is promising to study multi-faith spaces and sites as examples of interreligious co-creation and cultural innovation. In general, approaching religions through the lens of their materiality — spaces, objects, diets, rituals — may disclose aspects of religiosity which tend to go unnoticed where the research focus is restricted to the dimension of beliefs and narratives. Consequently, a focus on the materiality of religions may also reveal new forms of agency of religious actors in innovation processes.

4.1.3 Questions for action research on religion and social/cultural innovation

Action-research in the field of religion and social/cultural innovation, then, will have to pay particular attention to the following questions:

- In which cases and contexts is it justified to interpret internal transformations of faith and religious groups as innovation processes?
- How do the specific doctrines and religious practices of those groups relate to the concept of innovation?
- What forms do the tensions between religious innovation and tradition assume in different historical, geographical, and social settings?
- Are the religions of migrants and minorities living in diaspora soliciting social and cultural innovation in the receiving countries?
- Are communities of religion, faith or belief currently involved as agents in, and drivers of, significant social or cultural innovation processes?
- What are the areas of social and/or cultural innovation in which communities of religion, faith or belief might play an active role in the future?
- How are religious communities relating to one another and to secular actors in the field of social and cultural innovation?
- Which social, cultural, and political factors enable or constrain intercultural and interreligious dialogue and co-creation?

These questions are addressed by the following research and action-research projects of FBK-ISR, which cover topics such as faith-based global healthcare systems, new spiritualities and lifestyles, the configurations of sacred places in a religiously diverse urban space, interreligious dialogue, freedom of religion or belief, and the role of religions in combating hatred and violence.\(^{26}\)

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\(^{26}\) For a more detailed description of FBK-ISR's project portfolio, please visit our website: https://isr.fbk.eu/en/
ATLAS of Religious Minority Rights produces an online atlas of religious minority rights in the OSCE region as a general overview of the social and legal status of religious minorities. This overview enables an analysis of the challenges posed to innovation in societies, politics, and the law by the need to guarantee freedom of religion or belief (Ventura ed. forthcoming).

Arguing Religion investigates the goals, the prospects, and the reach of argumentative debate in responding to religious disagreements. It develops an innovative approach to religious diversity (Costa 2015; 2019; Rähme 2018).

Global Faith-Based Health Systems explores the domain of healthcare services provided by international Catholic and other faith-based organizations. One of its main focuses is on processes of so-called reverse innovation, i.e., on the transfer of innovative responses to healthcare needs in developing countries to developed markets (Jacobs - Ventura eds. forthcoming).

Religious Intolerance. Open Challenges for Education studies and designs innovative educational practices to prevent/contrast intolerant and violent discourses or attitudes among young people (Benadusi - Fabretti - Salmieri eds. 2017).

Religion and Violence analyses the relationship between religion and violence, considering religion as linked to politics, society, culture, economy, and ethics (Lefebure - Tonelli 2018).

Mountains and Spirituality aims to investigate a spiritual change that is taking place today at the boundary between religion, individuals and society. It focuses on a shift in lifestyle, which is both a spiritual innovation and a creative answer to some forms of modern idolatry such as the cult of acceleration and newness (Costa ed. 2018).
4.2 RELIGION AND INNOVATION IN SCIENCE AND TECHNOLOGY

Research on the relations between today’s religions and innovations in the fields of science and technology can be expected to produce insights as to whether and how the emergence and take-up of new scientific results and of novel technologies induce change within traditional religious communities or even enable the creation of new religious movements – leading to what we identify in our triangular model of religion and innovation as innovation in religion. Conversely, such research can also serve to understand the role of religious (individual or group) agents, and of the shifting constellations of religious diversity in contemporary societies, in shaping the relationship between religious and scientific thought, and in driving technological innovation processes – highlighting the dimension of religion in innovation.

Regarding technology in particular, a construal of the relationship between religion and technological innovation in terms of bidirectional influences permits a clearer view on the social, and cultural mediation of technology development and diffusion, which involve an interactive process between researchers, technologists, and social stakeholder/user groups (MacKenzie - Wajcman eds. 1999; Latour - Woolgar 2005). At this point it merits emphasis that the investigation of the two-way interaction between religion on the one hand, scientific and technological innovation on the other, may also produce benefits for technology development, e.g., regarding digital tools for technology-enabled or technology-assisted social innovation and inclusion.

In this section we focus on the area of computer science and digital technologies as a first example and then take a look at a further area that is particularly relevant to research in religion and innovation: the fields of biomedicine, biotechnology and neuroscience.

4.2.1 Religion and digital technologies

Over the past 25 years or so, a steadily growing body of empirical and theoretical research has provided rich descriptions and, to some extent, generalised analyses of how religious communities interact with (adopt, adapt, shape use, and develop) digital tech-
nologies (Campbell 2013; Evolvi 2018; Leone 2014; 2018). Initially, work on these topics often started from the implicit assumption of a dichotomous relationship between the daily life-world on the one hand, digital media and virtual environments (the “cyberspace”) on the other. Digitally mediated experience was regarded as something juxtaposed to, and essentially different from, daily life experience, as something that interrupted and disrupted people’s ordinary routines. As a kind of alternative realm, the Internet often served as a speculative screen for either utopian or dystopian projections (Højsgaard - Warburg 2005). The tone quickly became more sober. It is fair to say that most researchers working on religion and digital technologies today have come to think that the assumption of a dichotomic relation between “the real” and “the digital”, for any appeal it may have had in the 1990s, is no longer tenable: the “offline and the online make one reality, one environment” (Lundby 2012: 102).

The religious sphere, then, is not exempt from the general trend of digitalisation, which has been drastically accelerated by the development and commercialisation of mobile broadband devices in recent years. Currently, artificial intelligence technologies (AI) and the “Internet of Things” (IoT), together with the commercialisation of so-called “smart objects”, are embedding digital technologies even more deeply within peoples’ day-to-day lives and routines, often changing them to a considerable extent in the process (Greengard 2015). So far, research on the interactions between religion and digital technologies has mainly focused on social media and digital games (Campbell ed. 2013; Šisler - Radde-Antweiler - Zeiler eds. 2017). Given the multitude of different digital technologies that

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today shape the daily life of people, we deem it important to extend the research scope – so as to include, for instance, the interactions of religion with mixed and virtual reality technologies, smart community applications and AI technologies.

In this regard, it is interesting to note that the utopian and dystopian discourses triggered by the Internet in the 1990s are resurfacing with regard to AI technologies. Despite the fact that AI and machine learning research and development today concentrate on narrow (single-task specific) AI systems – e.g., in automated driving, machine translation, stock trading, medical image analysis, and urban security – the imaginary of AI in public debates is often characterised by the assumption that general and superhuman AI is imminent. This imaginary gives rise to speculations, either utopian or dystopian, about the future of humanity after the advent of the so-called “singularity”, i.e., after a hypothesised moment in time when general artificial intelligence will have outperformed and surpassed general human intelligence. As in the case of the Internet, such dystopian or utopian discourses often employ religious vocabulary like “damnation”, “apocalypse”, “paradise”, or “salvation”. Here we can find clear traces of the religion of innovation dimension identified in our triangular model (see p. 7). Such speculative ideas and the vocabularies in which they are communicated are interesting in their own right. They merit research and analysis. However, they have a serious drawback in that they distract from the very concrete normative issues arising from the narrow AI systems that are employed in various areas.


31 Regarding the dimension religion of innovation more generally, see also Cox 2016 on how representations of the global market have assumed religious connotations.
already today. Among these issues there are, for instance, racial, ideological, gender, and religion-related biases, which are due to the data that are used to train existing AI systems, and the so-called “black-box problem”, which consists in the fact that automated decision-making systems often work in ways that are not accessible to the individuals affected by their decisions (e.g., loan decisions)\textsuperscript{32}. With regard to existing and emerging AI technologies, two pressing questions for research in religion and innovation are the following:

- How, and to what extent, can religiously grounded values be relevant for determining desirable and undesirable features of existing and emerging AI technologies?
- How, and to what extent, can religiously grounded values be taken into account in guidelines and policies for AI research and development?

4.2.2 Religion, biotechnology and neuroscience

In addition to the field of computer science and digital technologies, a further area of scientific and technological innovation that is crucial to the interaction of religion and innovation is the field of biomedicine, neuroscience, and biotechnology\textsuperscript{33}. Beginning with the second half of the twentieth century, religion has been deeply involved in value-driven debates over biomedical and biotechnological innovations. The debates, which are in full vigour today, on the one hand regard novel techniques for intervening on health and disease, life and death, and, on the other hand, they concern the involvement of patients as bearers of autonomy, freedom, and rights in the medical decisions and choic-


\textsuperscript{33} In December 2016, FBK-ISR held an exploratory workshop on brain plasticity and belief systems with Roberto Alciati (then University of Erfurt), Leonardo Chelazzi (University of Verona), Uri Hasson (University of Trento), Gagan Sood (London School of Economics), Federico Squarcini (University of Ca' Foscari, Venice), and Gaetano Valenza (University of Pisa).
es that concern them (Shook - Galvagni - Giordano 2014). Viewed from the perspective of the three-dimensional framework of religion in innovation – innovation in religion – religion of innovation, the field of biomedicine, biotechnology, and neuroscience can be considered as a paradigmatic one since it exemplifies all three dimensions: the impact of religion on biotechnological and neuroscientific innovation processes, the impact of the latter on religion, and the tendency of innovation to turn into a belief system (religion of innovation). Regarding the dimension religion in innovation, religious traditions may be one valuable resource for enabling a fruitful and reciprocal confrontation in public debates over the direction that biomedicine and biotechnology can or should take. As for the dimension innovation in religion, novel developments in biomedicine and biotechnology solicit reflective processes within religious communities that may lead to a re-interpretation and innovation of traditions, practices, and normative outlooks. With respect to the dimension religion of innovation, some strands of the scholarly and scientific debates on human enhancement and posthumanism, as well as parts of the public debate on technology and the future of humanity in the media, tend to employ the vocabulary of innovation as a vehicle for quasi-religious discourses (Rähme - Galvagni - Bondolfi eds. 2014).

4.2.3 Questions for action research on religion, science and technology

Research in the field of religion and innovation in science and technology, then, will have to pay particular attention to the following questions:

- How do religions go about responding to the belief-related and/or doctrinal dilemmas that new scientific findings and novel technologies may present?

- How, and to what extent, do scientific and technological innovations change the religious practices of different faith communities and individual believers (Rähme 2018)?

- To what extent is it justified and useful to describe these changes as innovations within religious practices and beliefs? For instance, does the adoption and adaptation, for religious purposes, of a novel communication technology on the part of a religious community itself merit the label “innovation”? Or
is this rather a form of appropriation of an innovation (Vitullo - Campbell 2016)?

- Vice versa, are the needs arising from social and demographic change (e.g., migration, growing religious diversification within societies) currently being addressed by technological research and development, i.e., do those needs have an influence on the directions of contemporary technology development?

- How are religious spaces, communities, and practices being represented and enacted in digital environments (e.g., in social media, virtual reality, and game environments)?

- Can digital religious environments/virtual environments have the same religious significance as non-virtual religious environments (Campbell ed. 2013)?

- How do different religious communities and institutions position themselves with regard to technological innovations, and on what grounds?

- To what extent, and how, do for-profit and nonprofit innovators, as well as different science and technology communities, take the interaction between religion and innovation in science and technology into account?

- To what extent do contemporary techno-futurist discourses draw upon religious imagery and vocabulary (e.g., the idea – widespread among adherents of the transhumanist movement – that technological progress will bring salvation)?

- To what extent do scientists and innovators adopt normative outlooks that are "religious" in the sense that they are based on beliefs that aren't regularly questioned?

- To what extent is it theoretically justified and useful to describe contemporary techno-utopian discourses in terms of a religion of innovation?

These questions are addressed by the following research and action-research projects of FBK-ISR:

34 For a more detailed description of FBK-ISR’s project portfolio, please visit our website: https://isr.fbk.eu/en/
Ethics, Religions and Medicine investigates the impact of moral and religious values on clinical choices and decisions. Its main focus is on biomedicine and neuroscience (Feeney et al. 2018).

Religion and Augmented Reality explores the potentials of virtual and augmented reality technologies for migrant religious minorities that lack proper places of worship in their receiving countries (Hejazi 2018).

Aspects of Human Enhancement focuses on ethical and religious questions concerning the enhancement of human performances and capabilities by technological means (Rähme - Galvagni - Bondolfi eds. 2014).

Boosting European Security Law and Policy supports the dissemination of knowledge and skills with regard to the subject of security and its role in the process of European integration. It involves public and private actors, such as policy-makers, business representatives, staff of public administrations and, in general, stakeholders in the field of European security (Annicchino 2018b).
5 RECOMMENDATIONS FOR RESEARCH AND ACTION IN RELIGION AND INNOVATION

Stemming from the considerations of our position paper, the following eleven recommendations are addressed not just to researchers working on religion and/or innovation in the social sciences and humanities, economics or finance, but also to a wider range of societal actors, from communities of faith or belief and their leaders to governments and policy makers, from computer scientists to healthcare professionals, and from entrepreneurs and finance managers to journalists. Our recommendations provide sound principles of research in religion and innovation as well as guidelines for action that can benefit societal actors in their attempts to strengthen the interaction between religion and innovation.
RECOMMENDATIONS FOR RESEARCH AND ACTION IN RELIGION AND INNOVATION

1

Avoid a friend or foe approach.

Religion as such is neither a friend nor a foe of innovation. Diverse religious communities and sub-communities and, indeed, different religious believers of the same faith may have very different attitudes towards innovation. Moreover, such attitudes are open to change. Apart from the attitudinal dimension, also take into account that, to different extents, religious communities, sub-communities and individuals are already contributing to innovation processes. Conversely, the friend or foe approach should be avoided in the opposite direction as well: innovation as such is neither a friend nor a foe of religion.

2

Take the context into account.

To avoid unwarranted generalisations that undermine the quality and outcome of the encounter of religion and innovation, action research in this field should be aware of, and systematically heed, the normativity and context-relativity of innovation, as well as the dynamicity, historicity and complexity of both religion and innovation.

3

Value diversity and freedom of religion or belief.

Do not think of religion as a simple, homogeneous and easily describable phenomenon, but rather think of it as a diachronically and synchronically diversified phenomenon that resists essentialist definitions. Making an effort to think of and approach religious diversity as a resource rather than (just) as a problem may improve the effectiveness and inclusiveness of innovation processes in society, culture, science, and technology. In order for this to be possible, value and protect freedom of religion or belief for all.

4

Go beyond the “from the lab to the market” model of innovation.

Action research in religion and innovation can track, assess and develop alternatives to the still predominant linear (unidirectional) frameworks in innovation research. In many cases – in particular with regard to the areas of social and cultural innovation, but also for innovation in science and technology – non-linear and multi-directional models may prove to be more useful, both theoretically and for orienting innovation initiatives at the practical level.

5

Value collective agency and responsibility.

Action and research in religion and innovation can conceptualise innovations in terms of collective agency and responsibility. This requires a focus on both users and providers in innovation processes, as well as on their interactions. Such a focus may benefit both researchers and innovation activists: researchers may learn from actors, and actors may obtain inspiration from the conceptual clarifications offered by researchers.
Think of scientific, technological, social and cultural innovation as interrelated processes.

Scientific and technological innovation may occur in response to societal needs and challenges. Vice versa, social and cultural innovation processes may be triggered by the introduction of novel technologies and the diffusion of new scientific findings. Innovation processes in these different areas are not separable from each other but go together.

Employ an inclusive and dialogical approach in the identification of problems and challenges.

In individuating societal challenges, action research in religion and innovation should seek a sustained dialogue with innovation activists and diverse religious communities. Such a participatory approach may contribute to improving the interaction between religion and innovation, and to creating novel spaces for freedom and creativity.

Listen carefully to opponents of innovation and to opponents of religion.

Action research in religion and innovation should be sensitive to the arguments pro and con innovation attempts and take into account what opponents of change and innovation have to say in support of their positions, without discarding opposition and resistance to innovation as irrational from the outset. The same holds with respect to the arguments of opponents of religion. In this way, research and action in religion and innovation can foster an attitude towards the prevalent “pro-innovation bias” that is at the same time critical and constructive.

Pursue multi- and interdisciplinary research and combine qualitative and quantitative methodologies.

Given the complexity of the interactions between religion and innovation, action research in this field should experiment multi- and, ideally, interdisciplinary approaches that combine qualitative value research and quantitative impact analysis.

Engage with innovation in politics and the law.

In addition to social, cultural, scientific, and technological innovation, the scope of action research in religion and innovation may be fruitfully broadened to include less explored areas, such as innovation in politics and the law. In this field, it is promising to study and experiment how the diversification of religious identities, practices, and strategies is questioning consolidated models of democracy, the public sphere, human rights, minority rights, collective vs. individual rights, equality, recognition, and common vs. private goods.

Engage with different value systems and the ways in which they are challenged by scientific and technological novelties.

Research and action in religion and innovation should explore the argumentative potentials inherent in the value systems proposed by religious traditions and secular ethics and bring them to bear on critical debates over the normative challenges arising from scientific, technological, social and cultural innovations.
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