



SFB 1199

Processes of Spatialization
under the Global Condition

Markus Sattler
Lena Stephan

**Thinking, doing and relating
innovation in Armenia
and Georgia: Innovation
as an internationalized
developmentalist
agglomeration project?**

Working paper series
des SFB 1199
an der Universität Leipzig
Nr. 31

Collaborative Research Centre (SFB) 1199
„Processes of Spatialization under the Global Condition“
at Leipzig University

Funded by



Markus Sattler, Lena Stephan

Thinking, doing and relating innovation in Armenia and Georgia: Innovation as an internationalized developmentalist agglomeration project?

This working paper is part of the Working Paper Series of the Collaborative Research Centre (SFB) 1199 “Processes of Spatialization under the Global Condition”. This working paper is also part of the Working Paper Series of ReCentGlobe, to which the SFB 1199 contributes since 2020.

© SFB 1199
04/2023

Vertrieb:
Leipziger Universitätsverlag GmbH, Oststraße 41, 04317 Leipzig
info@univerlag-leipzig.de

ISBN: 978-3-96023-456-2
ISSN: 2510-4845

Markus Sattler, Lena Stephan

Thinking, doing and relating innovation in Armenia and Georgia: Innovation as an internationalized developmentalist agglomeration project?

Markus Sattler, Leibniz Institute for Regional Geography, m_sattler@leibniz-ifl.de

Lena Stephan, Leibniz Institute for Regional Geography / University of Greifswald,
l_stephan@leibniz-ifl.de

Content

Abstract	4
Introduction	5
Innovation as a category of analysis and a category of practice	6
Innovation: Emergence of an economic buzzword	6
Categories of analysis and practice: The politics of innovation	6
Ingredients and caveats of an embodied practice-based approach	7
Imagining Innovation in Georgia and Armenia	10
Armenia	10
Georgia	11
Enacting Innovation in Armenia and Georgia	14
Discussion: Practicing innovation as an internationalized developmentalist agglomeration project?	20
Conclusion	22

Abstract

Innovation and entrepreneurship are buzzwords that fit any policy discussion on economic development. In this sense, innovation is not only a category of analysis employed by (social) scientists to circumscribe a defined set of economic practices for analytical purposes. Innovation is simultaneously a category of practice employed by practitioners and academics with their own, sometimes concealed, political agendas. Providing a situated sketch for a socio-spatially more attuned definition of innovation as a category of analysis, the article primarily asks what kind of innovation practices are imagined and/or enacted by both academic and policy circles. Thus, the article aims at scrutinizing the politics involved in thinking, doing, and relating innovation in the context of Armenia's and Georgia's quest for viable economic trajectories. We assess the legal and organizational framework in both countries and funding patterns of Georgia's Innovation and Technology Agency (GITA) and Armenia's Enterprise Incubator Foundation (EIF). Locational analysis of grant holders suggests company concentration within metropolitan areas of Tbilisi and Yerevan. Analysis of selection criteria of funding program allows for the assertion that a developmentalist project is advanced. Rather than reifying the actors' language of innovation, we wish to highlight that current imaginations and practices of innovation are analytically better understood through the concept of "internationalized developmentalist agglomeration project".

Introduction

Innovation is considered a driving force of capitalism. Due to the alleged imperative to become or remain competitive to survive in the global economy, innovation is attested a prime importance. Actors of different political background affirmatively espouse the “innovation imperative” (World Bank 2010, 1) or are at least forced to reckon with the rules that it imposes. As the narrative in mainstream economics goes, without innovation, every enterprise, region, or country risks losing ground in a remarkably dynamic world economy. The issue of innovation, it seems, is even more accentuated in what is called “transitional countries”, including the post-socialist countries. This is the case because the issue is not of maintaining innovation vis-à-vis challengers but to become innovative in the first place. Within this pro-innovation developmentalist discourse, everyone strives to increase one’s innovation capabilities and thereby transcending the “necroeconomics” characterized by dead enterprises as remnants of the Soviet command economy (Papava 2015). The discourse around innovation is truly “global” but manifests itself in more nationalized and localized adaptations, emulations, and negotiations. The following article grapples with the innovation discourse and practice in Georgia and Armenia. Both are intriguing cases, since they figure most prominently within the Central Asia / South Caucasus ‘region’ in terms of their ranking within the “Global Innovation Index” and the “Knowledge Economy Index”, which not only describe but also perform a hierarchy of innovation systems (Cornell University, INSEAD, and WIPO 2020; EBRD 2019). Our research is based on desktop research, field research and expert interviews. The central argument we want to pursue is that the imagination and enactment of innovation is done more analytical justice with what we call “internationalized agglomeration project”. Our main contention is that an openly developmentalist language of innovation powerfully manifests itself in funding programs, promoted by a variety of actors such as the World Bank in conjuncture with the Armenian and Georgian government, thus complicating the easy identification of “agency”. To account for the practice of innovation, we therefore shortly discuss the notion of an “internationalized developmentalist agglomeration project”. Nonetheless, we stay attuned to deviating imaginations and practices that could be the seeds of an innovation project no longer haunted by developmentalist thought.

To arrive at this notion, we introduce and employ the distinction and interplay between categories of analysis and categories of practice as a useful angle to grapple with the ethico-political stakes of innovation discourse (Chapter 2). Subsequently, we will travel down to the national and sub-national (regional) level to examine how the innovation discourse is imagined and institutionalized in Armenia and Georgia (Chapter 3). In this section, we also address the negotiations in how innovation is imagined and enacted. Lastly, we will examine what innovation-related organizations promote and especially fund, that is, how “innovation” is reenacted as a category of practice (Chapter 4).

Innovation as a category of analysis and a category of practice

Innovation: Emergence of an economic buzzword

In the most general and etymological sense, innovation usually refers to the “renewal”, “change” in an established arrangement. Innovation is thus rooted in an evolutionary perspective. From these very broad roots, it has been increasingly popularized in the emerging discipline of economics. Nowadays, innovation discussions seem to be vastly dominated by economists although a renewed interest in social innovation can be identified. The idea that innovation is a driving force of contemporary capitalism gained a prominent position starting with Schumpeter’s oeuvre. Viewing innovation in the context of cyclical waves, Schumpeter argued that innovation is what keeps both entrepreneurs motivated (as it allows for short- and mid-term profits) and the economy dynamic. We similarly owe to Schumpeter the popularization of Ricardo’s classifications according to which innovation can be distinguished as: “1) introduction of a new good; 2) introduction of a new method of production; 3) opening of a new market; 4) conquest of a new source of supply of raw materials or half-manufactured goods; and 5) implementation of a new form of organization (Godin 2008, 35).” This line of thought retains the colloquial and etymological leanings regarding evolutionary renewal. Yet, with the notion of “creative destruction”, Schumpeter moreover highlights the disruptive effects of innovation, in contradistinction to the “civilizing” effects that earlier economists championed.

Categories of analysis and practice: The politics of innovation

Despite the contribution by Schumpeter and other scholars, we wish to appreciate innovation from a practice-oriented perspective. That is, for the moment we refrain from deductively providing our own definition / model of innovation to examine whether or not that (our) idea of innovation is implemented in Armenia and Georgia.¹ We argue that Brubaker’s distinction between ‘categories of practice’ and ‘categories of analysis’ can be a starting point to advance a critique of central concepts in social analysis including ‘innovation’. The closest to a definition that Brubaker offers is that

“[b]y ‘categories of practice,’ following Bourdieu, we mean something akin to what others have called ‘native’ or ‘folk’ or ‘lay’ categories. These are categories of everyday social experience, developed and deployed by ordinary social actors, as distinguished from the experience-distant categories used by social analysts. We prefer the expression ‘category of practice’ to the alternatives, for while the latter imply a relatively sharp distinction between ‘native’ or ‘folk’ or ‘lay’ categories on the one hand and ‘scientific’ categories on the other, such concepts as ‘race,’ ‘ethnicity,’ or ‘nation’ are marked by close reciprocal connection and mutual influence between their practical and analytical uses” (Brubaker 2004, 31).

Categories of practice and categories of analysis are thus characterized by a “heavy traffic between the two, in both directions” (Brubaker 2012, 2). Brubaker introduces the terminology against the backdrop of the rising emphasis on identitarian categories for explaining social and political phenomena, dissatisfied how the academic usage of identitarian concepts such as ‘nation’ are often conflated with colloquial or nationalists’ usages of the term. While accounting for the practice of the nation should be still the main remit of a theory of nationalism, Brubaker cautions us “to avoid unintentionally

1 We will however come back to the point later in this chapter, when we make transparent our own position.

reproducing or reinforcing this reflection of nations in practice with a reification of nations in theory” (Brubaker 1996, 16 *Italics in original*).

Brubaker himself hints to the possibility of applying the distinction beyond ‘groupist’ identity categories (Brubaker 2004, 32). Similar to nationalism studies, studies on innovation address innovation-related practices and sometimes, too, end up adopting too quickly some of the social actors’ claims. Moreover, current scholarship and the predominant typologies and classifications (radical vs incremental innovation / process vs. product vs. organizational innovation etc.) hardly account for the “politics of innovation”, for the practices and effects, dis- and associations that become realizable through certain ways of thinking, doing and relating innovation. With the idea of thinking, doing and relating, we emphasize interconnections between the terms. Ways of thinking are (imperfectly) related to ways of doing and vice versa. Both imagination and enactment attest to a particular relation to the world.

Schumpeter’s ideas on innovation still figure prominently among contemporary policy-makers who largely adopt his typology of innovation, demonstrating the traffic between categories of analysis and practice. At a superficial glance, we could argue that “thinking” innovation has not much changed. But crucially, Schumpeter’s ideas are now detached from the larger aim to understand innovation-induced creative destruction. Rather, innovation is rendered an affirmative developmentalist strategy with a few notable examples becoming more vocal in articulating discontent within innovation research (Godin and Vinck 2017). Yet, neither Schumpeter was uncritically championing “destruction”. The very notion of “destruction” allows appreciating how certain social agents are left behind in the incessant drive for innovation, competition and economic development. This is why an analysis of relating is fundamentally important. Thus, our approach is not informed by essentialized notions (of what innovation *is*) but by how innovation is constituted by relating it to other imaginations and practices.

Brubaker reminds us that “as scholars we can and should adopt a critical and self-reflexive stance towards our categories” (Brubaker 2012, 6). Otherwise, we can be complicit in the solidification of publicly mediated representations (Brubaker 2012, 5). By using the identical vocabulary and indicators as policy-makers (and other social agents), social science debates run danger to replicate existing, and potentially problematic, categories and classifications (Schlichte 2018) and thereby reproduce “views of the social world which contribute to the permanence of these relations” (Bourdieu 1985, 202). When scholars rely solely on the documents or on expert interviews of the very same agents that intervene in the name of innovation to assess the ‘effectiveness’ thereof, we risk reproducing categories of practice as categories of analysis. The distinction between categories of analysis and categories of practice urges us to take imaginations and practice – the categories of our social agents – seriously without abandoning the task to interrogate their meaning constructions and practices.

Ingredients and caveats of an embodied practice-based approach

Thereby, our practice-oriented approach goes beyond a subjectivist phenomenology but also a strongly objectivist account, that denies positionality, on two levels. First, our approach articulates the necessity to identify the limiting and enabling conditions of intelligibility that structure perception. These are fundamentally enmeshed in power relations. Actors equipped with more symbolic power are more likely to impose their vision and division of the world (Bourdieu 1989). A difficulty in establishing the conditions of intelligibility is that they disclose themselves not only in what they enable but in what they limit. Henceforth, they are not fully available for empirical observation. Therefore, practice theory must be also concerned with all the practices “that cannot be intelligibly said or done” (Kompridis 2011, 267). KEI and GII rankings intelligibly relate innovation to conceptions of rivalry,

competition and penalization of welfare policies.² But what about other relations that innovation could foster? Can we conceive innovation as a tool for re-communalization (Gibson-Graham and Roelvink 2009; Gibson-Graham, Cameron, and Healy 2013)? Examining the margins of the intelligible (and by extension, the margins of the possible), enables us to understand the power relations more appropriately at work in innovation promotion. Despite the well-founded fears that innovation in practice can mean everything and nothing, one can nonetheless posit that the continuous negotiation between the intelligible and unintelligible demarcates a line that reduces intelligible and realizable innovation meanings dramatically. We can hardly call innovation a mammal.

Second, we interrogate practice-oriented approaches that seek to reconstruct the practices from an allegedly distanced position. That we as scholars, too, practice the worlds we describe, and think how that shapes our research (the 'reflexive' stance) is not enough for us. Research, for us, is about generating possibilities and spaces for discussion and intervention. Our orientation is rooted in a more embodied research praxis that takes our own positionalities and desires seriously. Examining innovation practices does not occur – in our view – from “above” and “nowhere” (Haraway 1988) but from a particular social location, positionality and desire (the German *Erkenntnisinteresse* could be quite useful here if understood from a materially grounded perspective). We posit that an analysis how innovation works out as a category of analysis and practice must be buttressed by such considerations to be accountable. So what *Erkenntnisinteresse* is guiding our research? Coming from economic geography, we are albeit more interested in what kind of spaces the discourse and practice of innovation creates, destructs and obliterates. In this regard, we are particularly inspired by a long-standing research tradition that seeks to theorize the nexus between innovation and agglomeration (Goldstein and Gronberg 1984; Graffenberger et al. 2019). We are attuned to not only see the possible spaces of creative destruction but similarly of re-communalization and therefore seek to interrogate how the innovation discourse and practice opens possibilities for enhancing communal and / or planetary well-being. Thus, we can hardly blindly buy the mainstream discourse according to which all forms of innovation are desirable and that the goal of innovation should be to increase competitiveness, especially in peripheral areas (Eder 2019). Similarly, we are skeptical about any discourse that highlights innovation for innovation's sake. And that to think beyond this is to be blind to the naturalized innovation imperative.

We think that innovation could well align with colloquial and academic definitions of innovation in terms of new products, services, and processes, organizational forms. Yet, we would crucially add that to make this definition a project commensurable with communal and planetary well-being, such innovation should be directed at satisfying the needs, wants and desires of more-than-human communities (Moulaert et al. 2005). In this regard, we are entirely clear that our motivations and desires perhaps stand uneasily with the overall agenda and rationality pursued by current and former governments, and the majority of donor organizations operating in the countries. They might furthermore conflict with a majority of Armenian and Georgian citizens who might desire the monetary rewards of capitalist entrepreneurial success more than the promises of a currently less quantifiable community economy we find inspiring. We happily invite the reader to question the benefit of two German, white and rather affluent scholars to pursue this kind of research in the region, being fully aware that such a position might be more easily secured against the backdrop of a higher salary and social benefits, and better career perspectives compared to most Armenian and Georgian citizens.

At this point, it is also crucial to add nuances to some Eurocentric narrations of what innovation allegedly is. Although evolutionary in perspective, the association with “exploration”, “discovery”, “capitalism”, and “competition” reminds us of a masculinist, capitalist and colonialist logic, which might only hardly correspond with historically constituted economic relations. Georgia and Armenia (both

2 In fact, there is not yet much research on the two indices, both of which are highly aggregated. Yet, they incorporate other frequently scrutinized rankings such as the WB Ease of Doing Business that are well known for their neoliberal agenda (Kluczewska 2020; Schueth 2011).

Eastern and Western) were widely “feudal” societies until the Russian Empire annexed them in the 19th century (Suny 1993a, 1994). With the abolition of serfdom in the Caucasus and a more forceful integration into both the Russian Empire and the capitalist world-system, Russian imperialist power unwillingly paved the way for one of the strongest Marxist and collectivist mass movements worldwide hailing from this small region. The nominally “free” peasants were overwhelmingly landless and ever more dependent on land-owning classes, thus complicating also the emergence of nationalism since the landowning national nobility was detrimental in the accelerating exploitation (Brisku 2015). The working conditions in industrializing places like Baku, Batumi, Tbilisi or Chiatura were abysmal. Ethnic and class differences / conflict intermingled in some of these cities as proletarianized Georgians were overwhelmingly rural migrants and Armenians – in the cities at least – rather in better positions (Suny 1993b). Ethnically mixed Eastern Armenia was predominantly rural, too. Thus, Armenia and Georgia ended the 19th and started the 20th century with a massive support for their own socialist (later on anti-Bolshevik or Bolshevik-skeptical) movements. Tbilisi was the initial headquarter for both the Marxist Social Democratic Party of Georgia and the equally Marxist Armenian Revolutionary Federation. Both, respectively, were shaping the countries’ short experiences during their first independence. Perhaps unsurprisingly, then, the Georgian Democratic Republic (1918–1921) was accompanied, economically, by a large-scale proliferation of cooperatives (Lee 2017) that was preceded by an ever growing labor movement and experiments in workplace democracy (Suny 1994, 144–208), though less is known about Armenia’s economic trajectory during the first Republic, whose existence was overshadowed by the genocide.

We consider the dominance of cooperatives as highly innovative (in organizational terms), and beyond the context of a straightforward “capitalist” society. With the second independence, this tradition was not revived. The nationalist form of the first independence was retained, the socialist content almost completely erased. Cooperatives in the whole former Eastern Bloc were further invisibilized in the making of the private market economy / state-backed command economy dichotomy. This dichotomy hardly accounts for the tradition of cooperatives that we outlined.³ Despite problematic orientations of the innovation discourse, we wonder to what extent innovation can function as an emancipatory project for communal and planetary well-being.

Lastly, we draw on a literature that theorizes the geographical dimensions that allow a concept to be diffused, modified, or contested. This literature asserts that “global” ideas not simply diffuse but that they are changed in the process of adoption. Taking postcolonial approaches seriously, we are aware that negotiations and deviations can occur in the adaptation of certain norms and that universalist discourses on innovation might be rooted in forms of onto-epistemological violence. Blurring the “us” / “them” binary, the postcolonial literature argues to identify the hybrid institutions that emerge in the encounter of “global” norms (here “global” is often a way of obscuring the local and contingent roots in the Global North) and to identify the complex ways how seemingly “local” actors (which is often a way of obscuring that we are talking about the vastly diverse places of the majority world) adapt, modify or even resist such adaptations. Whether this concerns “norm translation, policy appropriation, resistance, and normative contestation” (Draude 2017, 579), will add to our understanding of the degree of antagonism or consent. Therefore, this literature often emphasizes “subversive forms of agency” (Draude 2017, 580) to more adequately determine the transition from the intelligible to the unintelligible, from the legitimate to the illegitimate, from the realizable to the unrealizable.

3 On the one hand, to simply call cooperatives “private” means to discard important differences in the production, appropriation and distribution of the surplus compared to LLC, LTD, or JSCs. These all pertain to the built-in democratic principles. On the other hand, they are certainly no “state” enterprises either, unless one equates cooperatives with undemocratic Kolkhozes which dominated the Soviet command economy as their only possible manifestation.

Imagining Innovation in Georgia and Armenia

In the following, we introduce the innovation concepts and programs in Georgia and Armenia. In the context of these two countries, the interplay between globally formulated ideas and their national, or regional, implementation is particularly important. As part of our analysis, we used desktop research, field research and expert interviews conducted between 2020–2022 to identify what actors in the region themselves prefer to call “innovation ecosystem”.⁴ We focus on the legal framework and introduce the main actors. Zooming in, we present innovation funding via the main bodies in both countries, EIF in Armenia and GITA in Georgia. In the subsequent chapter we will focus on some specific funding programs within EIF and GITA. We argue that this entry point can be illuminating for two reasons. First, the importance and influence of finance on firm behavior in economic geography is increasingly asserted (Pollard 2003). Second, the rather early-stage business incubation funding projects are detrimental as they provide the winners of the competition with ideas how entrepreneurialism should be evaluated and what defines an intelligible, desirable and realizable innovation project.

Armenia

To increase and support innovation and innovation projects, Armenia has adopted the **Law on State Support for Innovation Activity** in 2006. The law defines innovation as “a final creative result that can be implemented in economic turnover as a new or improved technological process, as a new or improved product or service” (Article 1a). Innovation is primarily interpreted in terms of companies, technology, and growth (see Article 4).

The main innovation-related actors in Armenia are the Ministry of High-Tech Industry and the Enterprise Incubator Foundation (EIF). Additionally, there is a limited amount of venture capital and angel investors, especially in Yerevan. Some (foreign) private companies like Microsoft, Intel and SAP (EIF 2022c) act in various stages of start-up and innovation development as do educational foundations such as TUMO. The establishment of a separate ministry dedicated to the high-tech industry reflects Armenia’s key commitment to foster the tech sector. In the absence of a notable organization that explicitly bears “innovation” in its name, we focus on EIF, which describes itself as “one of the largest technology business incubators and IT / High-Tech development agencies in the region, operating in Armenia” (EIF 2021d). Furthermore, it makes a connection to the innovation discourse by further defining its commitment “to support the development of information and communication technology sector in Armenia through creating a productive environment for innovation, technological advancement and company growth” (EIF 2021d). It was established through the WB’s Enterprise Incubator project, which ran from 2002 – 2006 and comprised project costs of 7,6 million USD (The World Bank 2021) and was created to “help unlock the institutional rigidities that hinder the development of Armenia’s human capital, in particular, as it relates to the business environment, so as to prod economic growth” (The World Bank 2021).

Start-up companies in Armenia, both located in Yerevan and in the different regions of Armenia, can obtain support through the grant programs of EIF (EIF 2021b). These programs are run by EIF with the help of several partners, among which are the World Bank (WB), the Armenian Government, EU4Business and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) (EIF 2021a).

4 Desktop research provided the ground for our analysis. Questions that could not be answered through desktop research were addressed during expert interviews and during fieldwork. In this context, it is important to understand that fieldwork itself allows for asking questions about the (perceived) mismatch between sayings and doings and thus especially suitable for theorizing the traffic between categories of analysis and practice. Expert interviews shall not be thus understood as uncritically adopting better ‘theoretical’ frames but as simply gaining insights on important ‘processes’ such insights from negotiations with World Bank. For a critical introduction, see Bogner, Littig, and Menz 2009

The aim of these programs is the assistance of companies “to develop their innovative tech products and solutions, as well as to direct them to promote traditional sectors of the economy” (EIF 2021b). Notable projects furthermore include the establishment of Regional Technology Centers such as in Gyumri or Vanadzor.

Examining the Armenian law on innovation and EIF mission, we note that innovation is often related to „economic turnover” and technological considerations. There is no mention of e.g., sustainable, or social innovation. While the EIF largely follows the legal definition, we moreover identify a concern that innovation must also occur in the regions. Geographical considerations are therefore present. When we visited the Gyumri Technology Center (GTC) in 2021, we could realize that the centrally located and large building (6000m²) hosted a variety of organizations, most of which were Yerevan-headquartered companies with a regional office at GTC. Companies worked exclusively in the ICT sector. The American company Synopsis that employs around 30 people in Gyumri took the largest office within GTC. The manager of the facility was largely satisfied with the current operations. According to her, Gyumri is more into software development as well as a creative tech flagship, which she tries to foster even more with a cooperation with the local academy of arts or with the design program by the polytechnic university. Closer cooperation shall lead to more business-oriented studies, so that artists “can be still artists but with skills in animations and 3D tools”. Vanadzor, on the other hand, has more an engineering focus. Thus, we realized that also a tech-dominated understanding of innovation prevailed at GTC, though beyond “only” the more narrow high-tech sphere.

Georgia

In 2016 and thus 10 years after Armenia, the Georgian government enacted the **Law on Innovation**, with the aim to

establish and improve a national innovations ecosystem required for the social and economic development of Georgia, to build the economy of the country on the basis of knowledge and innovations, to facilitate the use of technologies in Georgia which are created in other states, to promote the introduction and export of intellectual property and technologies created in Georgia, and to ensure the penetration of high technologies into all areas of science and economy in order to increase the competitiveness of the said areas (Article 1).

Initially, innovation is labeled as a method for *social* as well as *economic* development (Article 1), which in later articles of the law however, is primarily linked to the goal of technological progress. Innovation is thereby defined as „a new or essentially improved, usable product, process or service having economic, scientific, or social value that may differ according to type” (Article 2). In Article 6, the law becomes more specific about the targeted infrastructure to establish innovation in Georgia. Specifically, the following list is provided: a) a scientific / technological park, b) a business incubator. c) a business – accelerator, d) a technology transfer centre, e) a laboratory of industrial innovations (FabLab) and an innovations laboratory (ILab), f) an innovations centre, g) any other infrastructure, which shall support innovation⁵.

Most of the mentioned organizations of the law were established and thus, formally, an innovation ecosystem can be said to exist. However, compared to Armenia, there is virtually no venture capital in Georgia. Only in 2021, an angel investor network has been established (cbw.ge 2021). The Law on Innovation also foresees the creation of Georgia’s Technology and Innovation Agency (GITA), a public

5 Infrastructure shall be implemented in accordance with the Organic Law of Georgia – Local Self-Government Code, which determines how local authorities shall carry out activities about their local environment (Article 16 (4)).

agency under the Ministry of Economy and Sustainable Development. Unlike Armenia, there is no separate ministry dealing with high-tech issues.

In the Law on Innovation, GITA is said to “promote the commercialization of innovations and stimulate the use of such innovations” (Article 5). The term “commercialization” is defined as “the practical application of an innovation having positive economic and social effects” (Article 2g). While colloquially commercialization evokes the idea of bringing a product / service to the market, mostly for financial gain, the definition set forward in the law allows for non-market exchanges with mainly social rather than economic effects, even compatible with a gift economy.

GITA was established in 2014 with the aim of fostering state-sponsored innovation. GITA itself formulates its mission as follows: “[Our] mission is a formation of an ecosystem which improves all kinds of innovations and technologies in our country, to promote a commercialization of knowledge and innovations, to stimulate using them in all fields of economy, to create an environment for the growth of innovations and high-tech products and developing high-speed internet nationwide” (GITA 2021b). This entails infrastructure development for innovation, commercialization, and venture capital growth through the development of innovation centers, internet access and training (ibid.).

The WB decided in 2015 to grant an International Bank for Reconstruction and Development (IBRD) loan of 40 million USD for the “Georgia National Innovation Ecosystem” (GENIE) project within GITA. The agreement was signed by the Georgian Government and IBRD for the duration of 5 years, 2016–2021 (GITA 2021a) but was prolonged due to the Covid-19 pandemic. According to the WB, GENIE complements and supports ongoing infrastructure investments and policy reforms and complements strategic and institutional reforms to enhance Georgia’s economic competitiveness. The aim of GENIE is consistent with GITA’s objectives in terms of increasing the innovative potential of businesses and individuals in Georgia through investments (The World Bank 2016). The role of planned community centers is central: to provide access to the internet for families and small businesses and to promote, transport and develop the corresponding skills to create and professionalize access to the digital economy (GITA 2021a). This is also central to the World Bank’s decision to support GENIE: “The Project will benefit from improvements in *regional infrastructure* as it seeks to connect innovators and small businesses outside the main cities to *global trade and knowledge networks*” (The World Bank 2016; emphasis added).

Although a wider notion of innovation is retained in the mission („all kinds of innovation”), explicit references to social innovation are now more difficult to identify. What innovation is good for and who benefits from the commercialization of knowledge / innovation and which kind of socio-material relations are deemed desirable becomes difficult to establish from the mission.

Field trips to two technology parks located in the regions of Georgia did not gather evidence regarding the ambition of GITA’s GENIE program to connect regional businesses into global trade network. Yet, there were signs for integration into global knowledge networks.⁶ More importantly, both tech parks were active in other fields such as igniting interest in technology among pupils through various mechanisms such as introduction to 3D printers, or the implementation of competitions in which pupils shall find solutions to self-posed and often local problems with available materials.

GITA regional branch staff superbly assisted in identifying some companies and helped to establish exploratory interviews with them. This included an oven producer who re-modelled old Soviet Volga cars into machinery, a nascent women’s cooperative, an internationally operating wine producer and a nationally active NGO that certifies (sustainable) agricultural producers around the country and assists them in the process of fostering sustainable practices. For this to happen, however, the manager of the tech park estranged herself from the tech-focused definition of innovation as proposed in the GITA Tbilisi headquarters to come up with a more contextually aligned conceptualization that owes

6 This integration was largely facilitated by donor money as several interviews with companies attested. These grants helped to establish contacts via study visits abroad or participation in trade fairs, the latter of which is also discussed quite prominently in the literature

to the predominantly agricultural economy of Eastern Georgia in which the tech park operates. This experience also helped us to question our own implicit modernist biases in innovation support. At this stage of the research, we strived to find the perhaps mythical high-tech company in some remote Armenian and Georgian valley. Our interlocutor, however, encouraged us to think place-based, rather than utterly abstract and helped us to abandon the developmentalist innovation discourse which locates the big – if not only – hopes in the high-tech sector. Contrasting to the first interlocutor, a manager of another regional tech-park was unable to provide any kind of “positive” examples from her region. Instead, she outlined how the bulk of local “non-innovative”, “non-tech” and hardly “start-up” (by law defined being maximum 2 years old) companies makes use of the free services available at the tech park that should be, however, designed for tech startups. As a result, one of her main activities is to constantly negotiate and decide who can use the services under which conditions.

Thus, GITA's regional branches implement innovative projects, which are not primarily linked to economic turnover, but more in terms of commercialization as defined in the law with all its social repercussions. Especially activities with pupils foster a non-marketized mode of innovation but in which nonetheless competition is early on inscribed into thinking and doing innovation. While there is a lot of technological playfulness involved, also a concern for the satisfaction of needs, wants and desires can be discerned. To the extent that regional tech parks work with companies, their focus is not on the companies producing “high-tech products” as outlined in the mission, but any kind of companies offering some new products or services. While both tech parks were well familiar with the overall economic structure of their regions and established links with many locally or nationally operating companies, for one manager the demands of GITA with its focus on “high-tech products” and “global trade network” felt more normatively desirable than for the other. Reversely,

Given the focus on working with young people in the regions instead of supporting (non-existent) tech-companies, the time is neither ripe to assess the degree to which the “commercialization of knowledge and innovations” is successful in the regions nor to evaluate the socio-material relations (or “social effects”) that are thus nurtured. Some of the effects will become palpable only in years, if not decades, to come given the focus on working with pupils.

In the following chapter, the largely WB-financed programs by EIF and GITA will be introduced to discuss in more depths the innovation projects in Armenia and Georgia.

Enacting Innovation in Armenia and Georgia

With the aim of establishing “local companies and the regional high-tech decentralization” (EIF 2022), EIF launched several matching grant programs since 2014 with its partners by targeting tech companies operating in Yerevan, Gyumri and Vanadzor. This project was expanded in 2019 to all regions (*marzes*) with the aim “to support innovations and new technologies in non-tech sectors” (EIF 2022a). The grant programs specifically support “new solution, product, service or process adaptation, improvement and/or development, which would stimulate the rate of technology absorption, technology transfer, innovation and commercialization in the private sector, foster collaboration between research centers and industries and promote the development of new technology-driven companies” (EIF 2022a). The Armenian startups introduced in this chapter were presented by EIF on the official website (EIF 2022b) based on the “Innovation Matching Grant” (IMG) and “Regional Matching Grant” (RMG) series. While both allowed for a maximum of 25 000 000 AMD grant size (around 50 000 USD), the former requires 50%, the latter only 15% co-financing. But even within the IMG, companies based in the regions have different, lower criteria regarding co-financing.

Georgia’s GENIE project includes several funding channels, with focus on e.g., prototyping. Central to this chapter are the two main funding channels for innovation, namely the “Startup Matching Grant” (SMG) and “Innovation Matching Grant” (IMG). SMG involves the award of GEL 100 000 for the implementation of a one-year project (90% of funding) to new, private, innovative, and technology-based enterprises, with co-financing from the applicant expected to cover at least 10% of the project budget (GITA 2021h). IMG covers „the promotion of innovation in business processes and the introduction of technologies for enterprises registered at least 2 (two) years before the call for proposals for the grant. They can be funded with a maximum amount of GEL 500 000-650 000 and a duration of two years. The applicant must provide at least 30% of the project budget as co-financing” (GITA 2021h). Until the end of 2020, GENIE has organized five different competitions for start-ups, which resulted in funding for the winning companies. These five competitions resulted in the promotion of a total of 96 startups.

In Table 1, an overview is provided over the GITA and EIF’s GENIE funding programs in Georgia and Armenia respectively.

Table 1 Location of firms

	Metropolitan ⁷	City ⁸	Periphery ⁹	Total
Armenia	91	15	1	107
EIF	91	15	1	107
Georgia	95	1	1	97
GITA – GENIE Funding Phase 1, 2, 3	58			58
GITA – GENIE Funding Phase 4	19		1	20
GITA – GENIE Funding Phase 5	18	1		19
Total	186	16	2	204

7 Armenia: Yerevan, Georgia: Tbilisi

8 Armenia: Vanadzor, Gyumri; Georgia: Batumi, Kutaisi

9 Armenia: All other locations

Despite the existence of regional techparks, their relations with local companies, and the ambition to support companies in the regions, our geographical analysis of location patterns of start-ups funded by GITA in the first five phases of the GENIE program indicates that more than 95% of them are in the country's capital, Tbilisi. The only company in the "periphery", registered in Kharagauli, turned out to be run by an individual living in Tbilisi as well. In both countries there is a strong concentration of funded companies in metropolitan areas. Yet, the pattern differs slightly in Armenia with more companies supported in the second-tier cities of Gyumri and Vanadzor. Moreover, some of the companies do not have their headquarters in the regions, but through the RMG were incentivized to establish offices in the regions, so that the actual number of offices is larger than the table suggests. Thus, many Yerevan-based companies established their offices within the GTC.

Rather than thus seeing the agglomeration-innovation nexus as an immutable geographical law, we argue that institutional design can at least partly mitigate the high concentration in the agglomeration. In Armenia, the co-financing requirements in the regions were considerably lower than for Yerevan. This functions as an incentive to settle to other parts of the country. A GITA representative recognized the importance of differential co-financing schemes, well aware that even a few hundred dollars might exhaust the financial capacities of many potential start-ups in the regions. Only most recently (2022), a funding program dedicated for the regions was established with support of the EU. Rather than identifying any principled agglomeration-centered ideology of GITA behind the programs, another conclusion seems more plausible: That innovation support is largely opportunity-driven, which would mean that the logics of donor agencies must be considered. However, negotiation takes place. Asked whether geographical considerations were ever discussed as criteria, one former GITA employee outlined that geographical considerations generally – not confined to funding programs – were more forcefully suggested by the WB. Yet, from the GITA point of view, the regions and people are too "backward" (sic!) for innovation support. Therefore, GITA was successful in tempering the ambitions of the WB to expand support for the regions. That Tbilisi benefits most from innovation support, then, is an accomplishment of GITA. In this discourse, it is effectiveness, not spatial justice, that is deemed more important.

In both EIF and GITA funding programs, operation manuals outline the evaluation criteria (Table 2). There are several elements we want to highlight. Generally, there is language of market and customer needs, not of (non-alienated) more-than-human needs. EIF even explicitly reserves the eligibility to JSCs and LLCs, excluding cooperatives from participating at EIF grants. As a result, potentially more democratically run enterprises cannot enjoy the benefits of grant schemes. Social, ecological or spatial criteria are almost non-existent. Where sustainability is mentioned, it refers to sustainability of income.

Table 2 Selection Criteria deduced from the Application Manuals

	Grants	Eligibility Criteria	Evaluation Criteria
EIF (2014/ 2020)	Innovation Matching Grants	<ul style="list-style-type: none"> Project focus: ICT or other high tech sector (such as engineering, clean and renewable energy, etc.) Registration as legal entity in Republic of Armenia as an LLC, OJSC or CJSC for no more than 3 years / No Sole entrepreneurs at least 3 team members with experience max US\$300.000 annual income, max .30 employees 	<p>Step 1 Evaluation (70 points) based on application:</p> <ul style="list-style-type: none"> Capability of the Team Product / service and Commercial Potential / Value / High Growth Rate in the market Understanding of Market and Customer Need Marketing Plan Risks and opportunities Implementation Plan Financials <p>Step 2 Evaluation (100 points) based on pitch / presentation:</p> <ul style="list-style-type: none"> Proposition (60 point) <ul style="list-style-type: none"> Clear problem and solution Business goal is stated Clear business model – how business benefits will be generated Market understanding is demonstrated Marketing and sales approach are clear Project results in sustainable income Project plan is realistic and timely Presentation Skills (20 point) <ul style="list-style-type: none"> Professional look & feel to presentation Useful and effective text Useful and effective graphics Maintained interest Q&A Skills (20 point) <ul style="list-style-type: none"> Ability to understand panel questions Substantive answers Honest about lack of information Direct and clear responses Relaxed and assured Thinks effectively “on the spot”
	Regional Matching Grants	<ul style="list-style-type: none"> ICT / High tech sector companies, based in Gyumri or Vanadzor, registered as legal entity in Republic of Armenia as an LLC, OJSC or CJSC / No Sole entrepreneurs at least 3 members, with proven experience signing a contract to become a tenant for 1 year for local Technology center 	
GITA	Startup Matching Grant (GITA 2020a)	<ul style="list-style-type: none"> Applicant is a business entity or natural No longer than 2 years incorporated Max turnover GEL 500.000 during last 12 month Majority ownership not belonging to a parent company Technology based projects / activities¹⁰ 	<p>Proposal evaluation:</p> <p><i>Criteria 1: Team (weight 20%)</i></p> <ul style="list-style-type: none"> Is this team a compelling fit to THIS opportunity at THIS time? Also includes: Do they clearly understand their customer and the problem? Did they demonstrate Domain Expertise? Are there any critical gaps in the team?

10 With some restrictions in accordance with Environmental and Social Management Framework (ESMF) of GENIE Project.

		<p><i>Criteria 2 Market Size / Scope / Opportunity (weight 30%)</i></p> <ul style="list-style-type: none"> • How big does this get? • How significant of a venture does this become if it succeeds? Also includes: How significant is the problem they are solving? • How competitive is the space? Dominated by a few well-funded players, or fragmented? • What is the scope of the market: local, regional, global? <p><i>Criteria 3: Timing / Traction (weight 10%)</i></p> <ul style="list-style-type: none"> • Is now the right time for this company to break out? • Is that evidenced with any traction or evidence? Also includes: it is idea / concept stage or product in the hands of the paying customers? <p><i>Criteria 4: Competitive Advantage (weight 25%)</i></p> <ul style="list-style-type: none"> • How compelling is the advantage or innovation at the core of the offering? • What is the competitive advantage of the start-up and which are the potential competitors? • Also includes: Is there a significant IP, or potential for IP. <p><i>Criteria 5: Product / Technology (15%)</i></p> <ul style="list-style-type: none"> • The solution solves a clear, significant problem “worth solving”. The tech / product provides (or will be capable of providing) a compelling innovation (tech, business model, etc.) that produces verifiable results. There is significant IP, or the potential for IP. <p>Final Evaluation: Same evaluation criteria as in peer review</p>
<p>Innovation Matching Grants Program (GITA 2020b)</p>	<ul style="list-style-type: none"> • The Applicant (and the Main Applicant in case of projects submitted in consortia) is a private sector (at least 51% privately owned) business entity with annual turnover of up to GEL 30 million incorporated under the applicable / current Entrepreneurs Law of Georgia, registered with Georgia’s National Agency of Public Registry (NAPR); In case of a consortia Main Applicant is designated by the consortia members prior to submitting the Application. All members of the Consortia will be eligible for joint obligations within the frames of the Georgian State law has been registered at the National Agency of Public Registry for at least one (1) year before the application is submitted; 	<p>Proposal evaluation:</p> <p><i>a 1–5 score for each criterion using the following scoring system – 1 stands for Weak, 2 – Fair, 3 – Moderate, 4 – Strong, 5 – Exceptional. The proposal can generate a total score of up to 35 points from each peer reviewer.</i></p> <p><i>Management and key personnel credentials and ability of the company (consortia) to deliver</i></p> <ul style="list-style-type: none"> • Does the management team and key personnel have adequate skills, education, knowledge, track record and experience to execute the proposed project? <p><i>Innovativeness of the technology, product or service; clear IP position and potential</i></p> <ul style="list-style-type: none"> • Will the proposal result in improvement of existing technologies, products or services? • To what extent does the proposal suggest and explore unique concepts or applications? • Does the proposal lead to enabling technologies for further discoveries? • Does the proposed technology, product or service have potential for creation of new IP? • Does the Applicant have full ownership / rights to develop and use the technology / product or service being developed?

- The majority of Applicant's (main Applicant's) ownership shall not belong to a parent company.
- Technology based projects / activities¹¹

Clear market need, competitive (preferably global) position and commercialization potential

- Does the proposed approach have potential to lead to a marketable technology, product or process?
- What is the specific market for the technology, product or process? Is it a growing market? Are customers/ users definable?
- Evaluate the competitive advantage of this technology vs. alternate technologies that can meet the same market needs.
- Is the technology, product or service competitive and what are the competitive threats?
- Preference should be given to globally competitive technologies, products and services.

Potential for generating revenue within two to three (2–3) years after the project start

- Does the proposed technology, product or service have potential to generate revenue within 1–2 years after the project is completed?
- Is the estimate of the target market realistic and who are expected to be the main competitors?

Viable implementation methodology and capabilities, and project milestones

- Is the proposed plan a sound approach leading towards commercialization?
- Are the overall methodology and activities well-reasoned and appropriate to accomplish the proposed development of the technology, product or service?
- Is there sufficient access to resources (materials and supplies, analytical services, equipment, facilities, etc.) to bring the project to successful conclusion?
- Are project milestones well defined, realistic and measurable?

Use of funds and adequacy of the project budget

- Are the items listed in the budget in line with the proposed activities (e.g. man hours, materials)?
- Are the proposed costs realistic?
- Would the budget benefit from any alterations or corrections (e.g. more funds allocated to IP protection, reducing consultancy costs)?

Technology and implementation risk management

- Are potential implementation problems, risks, and proposed solutions clearly identified and mitigated?
- Will the proposed approach establish the feasibility and will the particularly higher risk aspects likely to be managed appropriately?

Final Evaluation:

Same evaluation criteria as in peer review

11 With some restrictions in accordance with Environmental and Social Management Framework (ESMF) of GENIE Project.

The manuals foresee in all cases a social and environmental pre-screening. Interestingly, none of our interlocutors from EIF or GITA mentioned this pre-screening, even when we asked them more explicitly about social / environmental criteria. One interviewee even mentioned the lack of ecological criteria as a reason why she decided to leave GITA in favor of an organization that seeks to promote environmental (and social) standards. This suggests the social / environmental pre-screening is not a crucial but rather *pro forma* step. And instead of having any positive role in the following evaluation process, the result of the pre-screening only facilitates the next selection process in both EIF and GITA schemes.

One of our interlocutors at GITA revealed to us that the eligibility criteria are mainly drafted by the WB to “give directions” for the process with GITA functioning as co-producer. The Operations Manual and our respondents at GITA emphasize that “unbiased” international experts evaluate applications and that GITA is only involved in the pre-screening. The five international experts consist primarily of Silicon Valley-based entrepreneurs. The EIF grant schemes foresee a very different composition. Here, the judging panel consists “of at least 4 judges, comprised of representatives of the Ministry of Economy of RA, Ministry of High Technological industry of RA, Granatus Venture Fund and private sector representatives”.

Discussion: Practicing innovation as an internationalized developmentalist agglomeration project?

Can we observe the emergence of a national and regional innovation (eco-)system as the EIF and GITA missions, national laws and international partners proclaim they envision? Both EIF and GITA indeed helped to establish branch offices / tech parks in the regions. Selection of the regional branches reflects population size in Armenia, in which GTC and VTC are located in the second and third biggest cities of the country, respectively. In Georgia, it is hardly transparent why GITA supports some regions quite considerably and others not at all. Three such centers exist in Kakheti but none in Imereti, for example. Taking into account the current funding patterns, however, we would question the assertion of a regional innovation system more strongly in Georgian than in Armenia. The locational analysis has demonstrated a pervasive support for the metropolitan regions of Tbilisi and Yerevan, respectively.

Judging from the national laws and organizational missions, we thus rather prefer to call the current imagination of innovation as mostly developmentalist, more so in Armenia than in Georgia. Developmentalist here means that all innovation discourse and practice is related to innovation's ability to accumulate exchange value, as defined for instance in Armenia's law. We thus wish to highlight the type of knowledge underpinning this agglomeration project. In our employment of the term then, developmentalism is a historically constituted way of thinking, doing and relating originating in the Global North (Escobar 1994) but taken up elsewhere, thus blurring the us / them line. A historically informed reading emphasizes that the very idea of LLC, LTD or more rarely, JSC was indeed until recently an alien form that hardly corresponds to historical ways of economic organization in the Soviet Union, the Russian, Ottoman and Persian Empire and even in the short independence period of Armenia and Georgia. These developmentalist imaginations are, as a result, relatively blind to issues of spatial justice or the satisfactions of more-than-human community needs. Notions of "social value", at least in the Georgian case, are included in the law, are somewhat visible in the regional tech park but completely evaporate when scrutinizing the selection criteria of grant schemes. Examining the eligibility and assessment criteria, we find no evidence that social value discussions play any observable, let alone key, role in selecting companies for funding. Together with the locational analysis, the practice of innovation, then, would be improperly understood as "only" developmentalist. Rather, we think the innovation practice can be analytically conveyed by the idea of an "internationalized developmentalist agglomeration project".

Agglomeration project, because companies in the metropolitan regions, and to a marginal degree in other large cities, are the main beneficiaries of this innovation support, at least when it comes to funding patterns. Not necessarily by some general laws such as economies of scale and scope, but also via institutional design, agglomerations are created or challenged. At least this can partly explain the difference between Armenia and Georgia concerning funding outside of the metropolitan centers. The idea that transitional countries should strive for agglomeration projects is not new. Those who champion it, nonetheless highlight that redistributive measures might be beneficial in order for polarization to be within politically and socially tolerable limits (Scott and Storper 2003). Yet, both states have very low tax bases for companies. Moreover, regions and communities still depend strongly on allocations from central state budget (Chala 2022). Taken together with the funding concentration on ICT companies, the crucial question is whether the "development" prospects associated with ICT and innovation promotion will materialize for more than a tiny minority (Equal Times 2020). This concern is aggravated as ICT companies in both countries have even less amounts of taxes to pay, especially if their clients are abroad.¹² Currently, EIF / GITA do not have any job monitoring of their respective

¹² In this case, there is only a 5% income tax for employees in Georgia, 10% income tax in Armenia; exporting companies neither pay VAT nor corporate tax in Georgia. In Armenia, there is generally no corporate tax for ICT companies and no VAT for exporting companies.

projects nor any other ways to monitor “commercialization”, more holistically understood. The most important monitoring finding that our GITA interlocutor provided us was the economic turnover of the companies after funding, which he hailed as an outstanding success.

To specify why we opted for “internationalized” is more complex and we wish to come back to the blurred line between “us” / “them”. GITA and the EIF illustrate some of the complexities within which innovation-related organizations operate. Nearly all major activities of EIF and GITA are supported either financially or technically by the WB, its affiliated IBRD, or other donor agencies, thus blurring the lines between state and non-state actor, Global North and South, national and foreign, principal and agent. Armenian / Georgian actors do not simply “react” to this developmentalist knowledge project. EIF and GITA themselves champion the innovation imperative. It can hardly appear as “imposed”. Rather, EIF / GITA co-create a Northern, developmentalist understanding of innovation. As opposed to a large literature that emphasizes the “subversive” or “resistant” forms, we tend to see some more hardline positions, especially within GITA. This is astonishing as our point of reference and comparison is the WB. Neither would it be, however, correct to see the operations of EIF and GITA as manifestations of a sovereign development trajectory of two independent nation-states. The very funding of EIF and GITA suggests that the WB plays a key role in the everyday operations of the agencies. The multiplicity of programs rather reflect the fashions within the development industry than any genuinely “national” programs. “Internationalized” therefore by no means must mean equal partnership as the official development industry discourse pretends.

At the same time does “internationalized” properly convey the diffusion of responsibility. Remarkable is the insistence that GITA is not enrolled in the selection process of successful companies, for which international experts are held responsible. This is a puzzling approach given that the agency co-designs the criteria. In this fashion, an “actor-network” is created in which agency, but also accountability and responsibility, is diffuse and opaque. The idea that Georgians should decide on company selection appeared to my interlocutors as undesirable. In a more benign reading, we could argue that too much interference by national jury members could result in corrupt practices given the small size of the country. However, interrogated from a postcolonial angle, it is remarkable that “international” (Silicon Valley-based) experts, often far detached from Georgian realities, should be the most suitable jury members. In the process of recruiting jury members, Silicon Valley is reified as the judge of a modernity-not-yet-achieved in Georgia. If such an approach does processual justice to the majority populations of Georgia and / or represents a socially and ecologically desirable blueprint is at least questionable, not least given Silicon Valley’s own contradictions. For EIF, the judging panel is remarkably more Armenian-dominated, avoiding some of the perils of relying too much on Northern experts. Yet, the simple fact that representatives are from Armenia does little to make innovation support a less developmentalist project.

Our own politics in choosing the concept of an internationalized developmentalist agglomeration project lies in visibilizing the onto-epistemological drivers underlying this project. We hope the concept opens an awareness that the language of “market needs” and “customer needs” must not be regarded as somewhat natural but a manifestation of developmentalist thinking. While this project might spur the growth of a tiny elite of tech-savvy Tbiliseli / Yerevantsi, it has arguably little to offer for supporting the innovation potential in the regions of Armenia and Georgia simply because the preconditions of the tech sector might be indeed absent in more peripheral areas. At the same time, something crucially can be appreciated once the developmentalist approach towards the periphery is unlearned. It is here in the regions, where we can observe both the limits of developmentalism and the seeds of an understanding of innovation that offers a future in which more-than-human community needs are prioritized over, or at least better reconciled with, the domination of market needs.

Conclusion

This paper has highlighted the innovation practices in Armenia and Georgia and conceptualized them as an internationalized project of becoming like an idealized agglomeration as existent in the Global North. Despite some activities and commitments to improve the innovation capacities in the region, innovation funding is highly concentrated in the metropolitan regions. While Armenia and Georgia have somewhat contrasting legal framework and EIF and GITA differing mission statements, locational analysis suggests a pervasive support for capitalist, technological, competition-driven understandings of innovation, and narrowly economic interpretations of value creation in both cases. Ecological, social and geographical criteria are largely absent in the practice of funding. Rather than reifying these ways of thinking, doing and relating as innovation support, we hinted at the lessons we could learn when contemplating the space production behind such projects. Given the dearth of research on innovation and the more “formal” economy, this paper at the same time is a call to scholars to take into account the importance of enterprise research in general and innovation support in particular, given at least its attractiveness among policy circles. Geographical thinking can be beneficial in this regard as well, to question labels such as “national innovation ecosystem” that, on closer inspection, rather look like agglomeration projects. The paper invites for many research areas that are as yet not tackled. While the paper scrutinized the institutional (formal legality) and organizational level, more fine-grained questions with funded, or non-funded companies, would be crucial to understand how they, in turn, negotiate this internationalized development project. Closely related, there is also a dearth of research what the outcomes of innovation support are. What are the companies exactly doing and what are the (post-)development prospects in their practice? Whose needs, wants and desires are satisfied, whose stay invisible? And what articulations of innovation could emerge if we involved other groups from more diverse social and geographical locations in the discussions what innovation can or should mean?

Leipzig Research Centre Global Dynamics

Working paper series des SFB 1199 an der Universität Leipzig No. 31

ISBN: 978-3-96023-456-2

ISSN: 2510-4845

Universität Leipzig
SFB 1199

E-Mail: sfb1199@uni-leipzig.de

<http://research.uni-leipzig.de/~sfb1199>



UNIVERSITÄT
LEIPZIG

Leipzig Research Centre Global Dynamics



Leibniz-Institut für
Geschichte und Kultur
des östlichen Europa



TECHNISCHE
UNIVERSITÄT
DRESDEN

Funded by



Deutsche
Forschungsgemeinschaft