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MANAGING NATURE, CONSTRUCTING THE STATE: THE MATERIAL FOUNDATION OF SOVIET EMPIRE IN TAJIKISTAN, 1917-1937

BY

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DISSERTATION

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ABSTRACT

This dissertation is a geographic and environmental history of Soviet state building that examines how the Tajikistan Soviet Socialist Republic was made. In the mid-1920s, the USSR created republics in Central Asia that endure today as nation states. Tajikistan, however, lay on land that is almost entirely mountainous, where there was no physical legacy of modern economy. To build socialism here, the regime needed to import capital, people, and animals along with plans and ideals. This, in turn, required the establishment of transportation and commodity chains. These material implications of political and cultural projects are routinely left out of histories of Soviet power. My work instead illuminates the material and economic operations that fueled and sometimes confounded socialism, and connects them to global patterns of economic growth.

The dissertation draws on archival and library sources from Dushanbe, Moscow, and North America to make three major scholarly contributions. First, my focus on tangible context and the *hows* of region-making puts political, social, and economic factors into conversation where they converged on the physical connections of state building that were literally transnational. Doing so bridges usual separations of sectors and geographies that are characteristic in histories of the early USSR. It furthermore contests conventional portrayals of Central Asia as an indistinct yet enormous cotton colony by highlighting the built and environmental conditions that made Tajikistan's Soviet experience unique. Drawing on human geography and landscape studies, I show that the construction of the first railroads and highways in Tajikistan was a distinctive form of Soviet state-building and nation-making. Second, I comment on the nature of *Stalinism*. This eponymous period is known for the centralization of power and planning in Moscow and the violent promotion of a modern, industrial society. My study of the operations of material economy in commodity chains spanning the USSR shows that real economic life was under-planned, and characterized by decentralized authority. In Tajikistan, utopian visions of technological prowess were implemented mainly by horses, camels, and human hands, often challenged by the rugged physical environment. Third, I compare Stalin-era enterprises in Tajikistan to other instances of postcolonial economic growth. I find that insights from global patterns of infrastructure and commodity chain management can help ascribe concrete causes, effects, and chronologies to mobilizational projects across the USSR. I also argue that this unfamiliar case of "international development" offers opportunities for new understandings from beyond the Euro-American imperial world.

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LIST OF ABBREVIATIONS, ACRONYMS, AND FOREIGN TERMS

arshin	roughly equivalent to 0.7 meters (Russian)
artel	cooperative workgroup
bai	wealthy; term used throughout Central Asia as an equivalent to *bourgeois* (regional languages)
Basmachi	Central Asian guerilla fighters against the Soviet state
BNSR	Bukharan People's Soviet Republic (1920-1924)
d.	*delo*; file (Russian)
EB TsIK	East Bukhara Central Committee of the Bukharan People's Soviet Republic; until 1924, known as Extraordinary Dictatorial Commission of the Bukhara Central Executive Committee (also known as *Dikkommissiia*)
f.	*fond*; collection (Russian)
GARF	State Archive of the Russian Federation
Gosplan	State Planning Committee
guberniia	province (Russian)
Ispolkom	executive committee (Russian)
kolkhoz	collective farm
l./ll.	*list/listy*; sheet/sheets (Russian)
Narkomtorg	People's Commissariat for Trade
NKPS	People's Commissariat for Ways of Communication
NTD	national territorial delimitation of Central Asia (1924)
oblast	province (Russian); equivalent to *viloyat*
okrug	county (Russian)
op.	*opis'*; inventory (Russian)
Orgbiuro	Organizational Bureau of the Communist Party
Promkooptrans	Producer's Transportation Cooperative Union of the Tajik SSR
Revkom	revolutionary committee; temporary organ of power established when a territory first came under Soviet rule; replaced by *Ispolkom*
RGAE	Russian State Archive of the Economy

RGASPI	Russian State Archive of Social and Political History
RKI	People's Commissariat of the Workers' and Peasants' Inspectorate (also known as *Rabkrin*)
RSFSR	Russian Soviet Federated Socialist Republic
SAZOMES	Central Asia Region Department of Local Transportation (under NKPS)
SNK	Council of People's Commissars (also known as *Sovnarkom*)
Soiuztrans	Union for Transportation Cooperation of the Tajik SSR
sovkhoz	state farm (Russian)
soviet	council (Russian)
Sredazburo	The Central Asia Bureau of the Central Committee of the Russian Communist Party (1922-1934)
SredazEkoso	Central Asian Economic Council (est. 1922)
SSR	Soviet Socialist Republic
SSSR	Union of Soviet Socialist Republics
STO	Council of Labor and Defense
t.	*tom*; volume (Russian)
Tadzhavtotrans	Tajik Automotive Transport Joint Stock Association of the Tajik SSR
Tadzhikgosstroi	State Committee for Construction in the Tajik SSR
Tajik SSR	Tajikistan Soviet Socialist Republic
Tajik ASSR	Tajikistan Autonomous Soviet Socialist Republic
TGDT	Tajikistan Central Directorate of Highways and Dirt Roads (also known as *TadzhikGlavdortrans*)
transportniki	freightage workers (Russian)
TsGART	Central State Archive of the Republic of Tajikistan
TsIK	Central Executive Committee
uezd	district (Russian)
USSR	Union of Soviet Socialist Republics
Vakhshstroi	Vakhsh River valley Agro-Industrial and Irrigation Complex of the Tajik SSR
verst	roughly equivalent to a kilometer (Russian)

viloyat	province (Tajiki); equivalent to *oblast*
VKP (b)	All-Union Communist Party (bolsheviks)
VSNKh	Supreme Council of the National Economy

INTRODUCTION

When the Soviet Union established the Republic of Tajikistan in 1924, it embarked on a comprehensive state building project. The territory would be the new, titular home of the Central Asian peoples identified as belonging to the Tajik nation. Socialist authorities created its borders through a process known as the national territorial delimitation of Central Asia, which also founded three other lands that endure today as nation states. In doing so, the revolutionary regime enacted a radical state building process that was unprecedented in global history. It was aggressively and explicitly anti-colonial, and designed to empower the native peoples of this formerly Imperial Russian territory. It created states for borders and nations that had never existed before; it did so with the official intention of developing Marxist utopia.

This dissertation explores the material implications of this process for Tajikistan. The republic's terrain is almost entirely mountainous and had never before hosted a car, train, or any industrial facility. To build socialism on this territory, with no physical legacy of modern economy, the regime needed to import commodities, people, and animals along with plans and ideals. This in turn required the establishment of transportation and commodity chains. Such physical ramifications of political and cultural projects are routinely left out of histories of Soviet authority. My focus on the tangible considers how the power examined by studies of discourse was experienced by agents of economy; it explores how power was projected, limited, or refracted by structures, objects, and relationships that shaped the direction, speed, location, and quality of daily actions characterizing the existence of the state. I illuminate the operations that drove socialism in Tajikistan, and I relate them to Soviet and global patterns of state building. This dissertation's analysis of materiality leads me to engage in several historical fields—environment, economic life, mobility—that are underexplored in the scholarly literature. I

establish the importance of transportation infrastructure and logistics in Soviet history, engage the USSR as a land embodying transnational physical relationships, and highlight some of Tajikistan's distinctions among Central Asian republics.

The creation of Tajikistan and other Soviet national territories was the result of a complicated process that drew on a peculiar form of state-led national self-determination. The Bolshevik Party, and then the government it formed after the October Revolution of 1917, had promoted the principle of national self-governance by the peoples who inhabited the lands of the former Russian Empire. Empowering the formerly oppressed was a core principle of the state's anti-capitalist and anti-colonial policies, as well as of its bid to spread revolution worldwide. Such apparent "affirmative action," as Terry Martin most famously calls it, also played a key role in legitimizing the ideology of the new regime in the former tsarist realm.[1] Marxist theory had posited that a communist uprising would first occur in countries where capitalism was most highly developed because corresponding development of the *consciousness* of exploited industrial laborers would lead its members to rise up against the upper classes. Among the requisite changes in consciousness was that of popular identification with a national group, a widespread European political phenomenon of the nineteenth century. The Bolsheviks, led by Vladimir Lenin, appropriated this philosophy for Russian circumstances by altering its prescriptive teleology. Marxism-Leninism provided them with the philosophical justification for their smaller uprising, led by a "revolutionary vanguard" against the regime of Tsar Nicholas II, prior to industrialization on Western European levels and related changes in popular consciousness. The Bolsheviks believed that Communist utopia could be achieved after such an

[1] See Terry Martin, *The Affirmative Action Empire: Nations and Nationalism in the Soviet Union, 1923-1939* (Ithaca: Cornell University Press, 2001).

uprising if the revolutionary regime actively worked, through education and social empowerment, to accelerate the changing consciousness of the residents in the land it served. Such a view also applied to the obligatory historical stage of popular identification with a nation.

This is the ideological reason why the Soviet state engaged the diverse population of the former tsarist empire by promoting and defining nations and national identities through cultural and geographic programs. The regime standardized languages, and developed literatures, clothing traditions, and other symbols of national culture. The USSR also encouraged or obligated the members of each group to live in close proximity to one another, providing them with designated national spaces and forms of self-governance. The size of territory and self-determining capacity differed in degree by group, depending on its size and other factors of negotiation. So, some groups were accorded their own Soviet Socialist Republics (SSRs), others "autonomous republics" (ASSRs) within republics, and most received some smaller form of recognition as minorities within larger regions, where governments were supposed to provide proportional national representation. Within such criteria, the Tajik nation qualified for its own territory. Tajikistan was created as an ASSR within the Uzbek SSR, and then transitioned to the full, stand-alone status of an SSR—the Tajik SSR—in late 1929.[2]

Thus, nationalities policy played a leading role in shaping Soviet geographies, institutional structures, relationships, and regional demographics. From the perspective of Central Asia, however, these politics did not account for *how* the state was established—only for the fact that it *was*, and for some of the reasons *why*. In this region, nationalities policy is a poor fit for

[2] The proceedings and mechanisms of these deliberations are not yet explained well in the historiography. See Arne Haugen, *The Establishment of the National Republics in Soviet Central Asia* (Houndsmills, UK: Palgrave Macmillan, 2003); and Gerhard Simon, *Nationalism and Policy Toward the Nationalities of the Soviet Union: From Totalitarian Dictatorship to Post-Stalinist Society* (Boulder, CO: Westview Press, Inc., 1991).

explaining state formation, since there is little evidence for the existence of strong ethnic identities or movements prior to the Bolshevik Revolution, unlike in the rest of the USSR.[3] Nevertheless, scholars tend to assume that Central Asia's experiences conform to the dominant narratives and processes identified in the broader literature on the Soviet Union, and especially that of socialist Russia. This body of work prioritizes the discourses and politics of nationalist projects as the drivers of state building. It emphasizes state-led modernization of identity, typically as a form of imperial imposition of newly coded cultures, or as a result of residents in the newly delimited homelands appropriating new selfhoods. These factors lead Francine Hirsch to assert that "no issue was more central to the formation of the Soviet Union than the nationality question."[4] But the virtual absence of studies of institutions in the Central Asian SSRs leaves only a muddled picture of how the state behind nationalities policy operated daily to establish and then sustain itself.[5]

This dissertation examines the *how* of state building beyond policy by addressing economy; specifically, it analyzes the monumental physical exercises that promoted the existence of the national republic and community of Tajikistan. Soviet planners wanted it and other republics of Central Asia to contribute to the Union through cotton production. The historiography of the USSR, however, comprises few histories of the Central Asian economy. Several studies discuss its establishment through analysis of wider cultural and political

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[3] Adeeb Khalid qualifies such an understanding by arguing that the Jadid intellectuals of Russian Central Asia conceived of a broad confessional form of nationalism in their modernization project. See Adeeb Khalid, *Making Uzbekistan: Nation, Empire, and Revolution in the Early USSR* (Ithaca: Cornell University Press, 2015), 13-18.

[4] Francine Hirsch, *Empire of Nations: Ethnographic Knowledge And The Making of the Soviet Nation* (Ithaca: Cornell University Press, 2005), 5.

[5] The few include, for example, Shoshana Keller, "The Central Asian Bureau: An Essential Tool in Governing Soviet Turkestan," *Central Asian Survey* 22, no. 2-3 (2003): 281-97.

projects.[6] With some exceptions, though, a prevailing focus on central authorities' dominance has resulted in a continuing characterization of economic experiences as homogenous with others throughout the Soviet Union.[7] As a result, the distinctiveness of individual republics of Central Asia is obscured through replication of the Soviet government's view that they together comprised a region with significant potential in cotton sector development.[8] I will show that the particularities of the Tajik SSR's participation in this broader agro-industrial sector distinguish it from neighboring territories. It is true that the major programs initiated in the mid-1920s for developing agriculture in fertile valleys of Tajikistan's southern regions were just part of a larger set of similar projects across Soviet Central Asia.[9] Tajikistan, however, faced material and institutional scarcity that was unique: it imported not only instructions, tasks, and financing, but also *virtually all* of the commodities needed for economic growth projects—from food, seeds, sand, and timber to trucks and excavators needed in economic growth and cotton cultivation—

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[6] See, for example, Adrienne Lynn Edgar, *Tribal Nation: The Making of Soviet Turkmenistan* (Princeton: Princeton University Press, 2004); Hirsch, *Empire of Nations*; and Alexander Garland Park, *Bolshevism in Turkestan, 1917-1927* (New York: Columbia University Press, 1957).

[7] Examples of scholarship that emphasizes regional particularities of economic life in Soviet Central Asia include: Sergei Abashin, *Sovetskii kishlak: Mezhdu kolonializmom i modernizatsiei* (Moscow: Novoe Literaturnoe Obozrenie, 2015); Maya Karin Peterson, "Technologies of Rule: Empire, Water, and the Modernization of Central Asia, 1867-1941" (PhD diss., Harvard University, 2011); and Christian Teichmann, "Canals, Cotton, and the Limits of De-colonization in Soviet Uzbekistan, 1924-1941," *Central Asian Survey* 26, no. 4 (December 2007): 499-519. More general works that are focused on contemporary economies of Central Asia sometimes provide useful background that emphasizes the distinctiveness of the region or its individual republics in the USSR. See for example Alec Nove and J. A. Newth, *The Soviet Middle East: A Communist Model for Development* (New York: Frederick A. Praeger, Inc., 1967); and Richard Pomfret, *The Economies of Central Asia* (Princeton: Princeton University Press, 1995).

[8] See, for example, Ian Murray Matley, "Agricultural Development (1865-1963)," in *Central Asia: 130 Years of Russian Dominance, A Historical Overview*, ed. Edward Allworth, (Durham: Duke University Press, 1994), 266-308. In fact, scholars discussing "Central Asia" traditionally have done so by reference to "Uzbekistan," the actual object of their analysis. See, for example, Terese S. Zimmer, "Regional Input into Centralized Economic Planning: The Case of Soviet Central Asia," *Policy Sciences* 18, no. 2 (September 1985): 111-26.

[9] See Kirill Nourzhanov and Christian Bleuer, *Tajikistan: A Political and Social History* (Canberra: Australia National University E-Press, 2013), 67.

primarily from Russia.[10] The actions involved in obtaining this capital, and using it to alter the physical legacy of Tajikistan's terrain to found a Soviet economy persisted throughout the 1930s.

From this material perspective, the narrative of the Tajik SSR's history is out of sync with major familiar timelines of the early USSR. In matters related to economy, scholars still promote the view that the first five-year plan (1928-32) inaugurated a so-called command system that endured until at least the mid-1950s. In this scheme, economic decision making was concentrated in the executive institutions of the USSR, and ultimately in Moscow, where upper-level officials disseminated plans setting production targets for every organization, prescribing operations and the ways that goals would be met.[11] This shift is conceived as part of a larger reorganization of Soviet institutions in the 1930s, which founded practices and dispositions that came to be collectively associated with the great leader's name as "Stalinism." In general, this meant the centralization of power and planning in Moscow, the violent promotion of a modern society, and forced, massive social upheaval caused by economic growth projects.[12] I will argue that Tajikistan's experience of this period of Soviet history does not align with these broad stroke characterizations. As I will show, a massive overhaul of this kind in political and economic sectors was simply impossible because the state was preoccupied with creating them. In

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[10] On this, see, for example, "Summary Report on Construction in the Tajik ASSR, by Construction Agency, in October 1929," Central State Archive of the Republic of Tajikistan (*Tsentral'nyi gosudarstvennyi arkhiv respubliki Tadzhikistan*; hereafter TsGART), f. 18, op. 1, d. 101 (t. 1), ll. 53-60 (full document); M. Asimov, *Tadzhikskaia sovetskaia sotsialisticheskaia respublika* (Dushanbe: Glavnaia nauchnaia redaktsiia Tadzhikskoi sovetskoi entsiklopedii, 1984), 109; and S. Nazrulloev, *Dorozhnoe stroitel'stvo i razvitie transporta v Tadzhikistane, 1917-1941 gg.* (Dushanbe: Izdatel'stvo "Donish," 1979), 6.

[11] See, for example, James R. Millar, *The ABCs of Soviet Socialism* (Urbana: University of Illinois Press, 1981), 21-35; and Alec Nove, *An Economic History of the USSR, 1917-1991*, 3rd ed. (New York: Penguin Books, 1992), 214-17, 267-71.

[12] See, for example, Robert C. Tucker, "Introduction: Stalinism and Comparative Communism," in *Stalinism: Essays in Historical Interpretation*, ed. Robert C. Tucker (New York: W. W. Norton and Company, Inc., 1979), xi-xx; and Sheila Fitzpatrick, ed., *Stalinism: New Directions* (New York: Routledge, 2000), 2.

Tajikistan, moreover, building rather than altering legacy was characterized by unplanned activities, and decentralized authority.

This does not mean that Tajikistan's experience was necessarily exceptional in the USSR. Rather, my uncommon emphasis on the material aspects of economic life leads to questions about and considerations of state and relationships across regions that are less explored. The historiography of the Soviet Union tends to rely on a Weberian definition of the state. This entity is a *ruling* or *political* organization monopolizing legitimate physical coercion within a particular space. As John A. Hall points out, however, "one must stress that Weber's definition is as much about pretension as reality" since monopoly on coercion is usually (but not always) an aspiration.[13] The lack of diversity in scholarly analysis of Soviet statehood may be related to broader scholarly trends of the recent past that hold close to Weber's concept.[14] The dominant theoretical approaches of thought of the last half-century—Marxism, modernization theory, neoliberalism—do not make concrete efforts to define the state, and claim that it is declining.[15] There is general agreement that states occupy particular spaces, where they control territories, institutions, bureaucracies, monopolies on or access to various or all forms of coercion and surveillance, legal authority and legitimacy—all of which may be drawn upon to express or exert *power*.[16] In the 1920s and 1930s, the Soviet state was changing at a bewildering pace. Economic

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[13] John A. Hall, "Varieties of State Experience," in *The Oxford Handbook of Transformations of the State*, ed. Stephan Leibfried et al., (Oxford, England: Oxford University Press, 2015) pdf of online version accessed 29 January 2016 through the University of Illinois at Urbana-Champaign (UIUC) Library Catalog, 1-2.

[14] See, for example, Theda Skocpol, *States and Social Revolutions: A Comparative Analysis of France, Russia, and China* (Cambridge, England: Cambridge University Press, 1979); and Charles Tilly, *Coercion, Capital, and European States, AD 990-1990* (Cambridge, MA: Basil Blackwell, Inc., 1990).

[15] Jonah D. Levy et al., "Changing Perspectives on the State," *The Oxford Handbook of Transformations of the State*, ed. Stephan Leibfried et al., (Oxford, England: Oxford University Press, 2015) pdf of online version accessed 29 January 2016 through the UIUC Library website, 1-2.

[16] See, for example, Joseph R. Strayer, *On the Medieval Origins of the Modern State* (Princeton: Princeton University Press, 1970), 5.

policies alone changed significantly at least four times in the first fifteen years after the Bolshevik Revolution. And, as in Tajikistan, many regions across the USSR were undergoing wholesale change of their material conditions for the purpose of strengthening the state through economic growth. The creation of the Magnitogorsk iron and steel complex of of the Ural Mountains and the Turkstano-Siberian Railroad network through Kazakhstan, for example, involved mobilization of large populations and capital on an unprecedented scale.[17] The daily activities that made this possible, like those in any period of social upheaval in global history, were characterized by ambiguity, contradiction, and contingency.[18]

Tajikistan was, however, well-suited to reframing questions about the Soviet state because of its physical environment. The absence of a material legacy of modern government or economy, as I have stated, makes prevailing frameworks for discussing statehood ill-suited to the decades addressed in this dissertation. The continuation of Tajikistan's dependency into the recent past, similar to other post-colonial global contexts, leads some self-described studies of state to circumvent any clear working definition at all.[19] Such works tend to emphasize apparent symptoms of state weakness that rely on models of stability. The undeniable material changes that manifested Soviet statehood in Tajikistan correspond better to less traditional frameworks that see the state as something continuously changing.[20] States transform themselves constantly

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[17] See, Stephen Kotkin, *Magnetic Mountain: Stalinism as a Civilization* (Berkeley: University of California Press, 1995); and Matthew J. Payne, *Stalin's Railroad: Turksib and the Building of* Stalinism (Pittsburgh: University of Pittsburgh Press, 2001).

[18] See, for example, Jeremy Adelman, *Republic of Capital: Buenos Aires and the Legal Transformation of the Atlantic World* (Stanford: Stanford University Press, 1999).

[19] See, for example, John Heathershaw and Edmund Herzig, "Introduction: The Source of Statehood in Tajikistan," in special issue, ed. John Heathershaw and Edmund Herzig, *Central Asian Survey* 30, no. 1 (March 2011): 5-19; and Mark R. Beissinger and Crawford Young, eds., *Beyond State Crisis? Postcolonial Africa and Post-Soviet Eurasia in Comparative Perspective* (Baltimore: The Johns Hopkins University Press, 2002).

[20] See, for example, George Steinmetz, ed., *State/Culture: State-Formation After the Cultural Turn* (Ithaca: Cornell University Press, 1999), 8-9.

to accommodate perpetual change in the circumstances and locations within their purview. In early Tajikistan, change could be observed because the entire republic's territory and relationship to the world was altered by an entirely new built environment.

I argue that the Soviet state forming in 1920s and 1930s Tajikistan was defined by the material conditions that it concurrently accommodated and intentionally transformed to create a particular space. My concern with the geographic history of how southern Central Asian lands became Soviet places attends to questions of how and when those spaces changed.[21] Allan Pred observes that while a designated space may be conceptually produced ("socially produced," in his words), the character of the place is dependent and contingent upon the material geography of power relations. His generalist claim is well-suited to Tajikistan:

> The production of space and place is both the medium and the outcome of human agency and social relations, and it occurs in conjunction with the making of histories. (The production of space and place by definition involves the construction of an unevenly developed built environment, the shaping of landscape and land use-patterns, the appropriation and transformation of nature, the organization and use of specialized locations for the conduct of economic, cultural and social practices, the generation of patterns of movement and interdependence between such localized activities, and the formation of symbolically laden, meaning-filled, ideology-projecting sites and areas).[22]

I argue that that the introduction of land transportation and commodity chains gave material form to the administrative creation of the Tajik ASSR in 1924 through ongoing negotiation with the native terrain. Built environment was a central aspiration and medium of place-making

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[21] On space and place as concerns of geographic history, see Alan R. H. Baker, *Geography and History* (Cambridge, UK: Cambridge University Press, 2003), 62. On the importance of mobility studies to understanding social dynamics and place-making in Central Asia, see Madeleine Reeves, ed., *Movement, Power and Place in Central Asia and Beyond: Contested Trajectories* (London: Routledge, 2012), especially 1-12; and Till Mostowlansky, "The Road Not Taken: Enabling and Limiting Mobility in the Eastern Pamirs," *Internationales Asienforum* 45, no. 1-2 (2014): 153-170.

[22] Allan Richard Pred, *Making Histories and Constructing Human Geographies: The Local Transformation of Practice, Power Relations, and Consciousness* (Boulder, CO: Westview Press, 1990), 10.

envisioned as the foundation for constellations of other activities. To this extent, my analysis of the physical allows me, as Bruno Latour has observed, to engage uncertainty in early Soviet history that is less bound by political and cultural discourse.[23] The completedness of desired physical objects, contexts, and relationships corresponded to the degree of socialism's contingency in the republic. This emphasis on the material is also what distinguishes my approach from Actor-Network Theory, where networks and relationality are foregrounded in the creation of spaces.[24] This dissertation is more concerned with how the desires of Soviet state officials in Tajikistan could be altered by material conditions.

The paucity in the republic of a built environment and other antecedents of the sort with which the USSR wished to define and sustain itself meant that authorities literally needed to import the state, in the form of commodities, people, and animals.[25] This dissertation's examination of this process contributes to a *spatial turn* underway among studies of Russia and the USSR. These include works that seek to correlate state ambitions with the vast size of its territory.[26] Robert Argenbright, for example, demonstrates that Soviet governance and state building was from the earliest years of the regime characterized by tension between the growing control of Moscow-based authorities and their proxies in localities. In the case of Bolshevik activists who traveled throughout far-flung regions of the former Russian empire, their work

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[23] Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network Theory* (London: Oxford University Press, 2005), 10-11, 60-71, 76.

[24] John Wylie, *Landscape* (New York: Routledge, 2007), 201.

[25] On shortages and the unequal distribution across regions and sectors, see Chapter 2: "Soviet Locational Objectives and Problems," in Holland Hunter, *Soviet Transportation Policy* (Cambridge, Massachusetts: Harvard University Press, 1957).

[26] Mark Bassin et al., "Russian Space," introduction in *Space, Place, and Power in Modern Russia: Essays in the New Spatial History*, ed. Mark Bassin et al. (Dekalb: Northern Illinois University Press, 2010), 3-19.

amounted to "efforts to transform places on the periphery of the regime's power, a process of *spatial colonization*, i.e., the effort to make real places resemble imagined space."[27]

I engage the tenuousness of the state in Tajikistan by focusing on southern regions, which I show were often or partly representative of larger problems of change in the larger republic and across the USSR. I define southern Tajikistan loosely, though conventionally, as those parts of Tajikistan that are at, or south of, the latitude of Dushanbe in today's Districts of Republican Subordination, and Khatlon province. The analysis here is not restricted to that region only, sometimes venturing beyond those vague borders—sometimes as far as western Russia. I take the view that southern Tajikistan is not restricted to the abstract place-making of its space—i.e., in terms of intent and perception. Rather, I see the region as a product of its connections to other places. From the perspective of Soviet state building, southern Tajikistan of the late 1930s was a product of material links formed by economy and mobility shared with other regions of the USSR developed over two decades.[28]

I engage the contingency and potential for transformation of these material factors by analyzing *projects* that produced them, and their everyday circumstances. The Soviet state in and of Tajikistan was the product of specific, purposeful constellations of activities. Project encompasses the variety of influential, sometimes loosely related factors associated with infrastructure construction and logistics or mobility management by invoking operational limits. Paul Greenough and Anna Tsing take this approach in order to overcome the difficulty of connecting effects of economic growth on social groups and environment. For them, projects are "tight clusters of ideas and practices that appear as particular historical undertakings...practical

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[27] Robert Argenbright, "Soviet Agitational Vehicles: Bolsheviks in Strange Places," in eds. Bassin et al., 144-45.
[28] On region-making, see Baker, *Geography and History*, 184, 191.

arrangements."[29] The concept dynamically connects policies, institutions, and individuals with its social and natural environmental challenges and manifestations.

The standpoint of projects provides flexibility for considering impact of related factors less commonly seen as involved with state activities. Operations related to built environments can be important opportunities for considering intersections of abstraction and materiality because they are where state endeavors play out in relation to processes that are not informed by intentionality.[30] Thomas G. Andrews refers to *workscapes* to describe settings where human labor negotiated environmental processes in the coal mines of southern Colorado. His term effectively captures the spatial complexity of enterprise and toil as "a constellation of unruly and ever-unfolding relationships—not simply land, but also air and water, bodies and organisms, as well as the language people use to understand the world...wherever people work, in short, the boundaries between nature and culture melt away."[31] In the mining workscapes of Fremont County, mules and mice both were intertwined in the life of labor as instruments and companions. Geology structured labor by creating limits on how miners could move and how productively they could work. Variation in the character of the earth created competition among laborers for worksites or compensation, for materials such as equipment and timber for pillars, and avoidance of danger and discomfort. These conditions forced companies accommodate workers, and to pay them higher tonnage rates than many regions.[32] In Tajikistan, the mountainous terrain influenced the kind of transportation that was possible (often contrary to that

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[29] Paul Greenough and Anna Tsing, eds., *Nature in the Global South: Environmental Projects in South and Southeast Asia* (Durham: Duke University Press, 2003), 15.

[30] See Paul S. Sutter, "The World with Us: The State of American Environmental History," *Journal of American History* 100, no. 1 (2013): 116-19.

[31] Thomas G. Andrews, *Killing for Coal: America's Deadliest Labor War* (Cambridge: Harvard University Press, 2008), 123-25.

[32] Andrews, *Killing for Coal*, 136-40.

officially desired), it affected the tempo and form of freightage, and thereby affected the pace and scale of economic growth. Here, horses and camels formed the basis of the freightage economy, and required that the state develop modern resources for maintaining and growing the available animal resources. As Sarah Whatmore points out, referencing Latour, attention to hybrid natural and built environments alerts "us to a world of commotion in which the sites, tracks, and contours of social life are constantly in the making through networks of actants-in-relation that are at once local and global, natural and cultural, and always more than human."[33]

The concept of project is one approach where the fields of geographic and environmental history overlap, facilitating my analysis of the physical relationships that comprised economic life in early Soviet Tajikistan as an *environmental management state*. Paul Sutter promotes "environmental management as a formative arena of state building, equivalent to social welfare and national security." Projects within this category "'see beyond the state'" to acknowledge the complicated interactions of many kinds of groups and institutions, as well as individuals across professions, and their ability to influence or be influenced in their relationship with the physical environment.[34] In the rapidly transforming, contingent material and state context of Tajikistan, economic growth projects were first and foremost environmental management projects. The included diverse interests meant to cooperate in common cause. In the workscapes of southern Central Asia, however, organizational and individual hierarchies were unclear and sometimes unknown, so that the state was in fact composed of diverse groups of varying, competing, and temporary influence cooperating on projects. Such a view of the state has grown in scholarship

[33] Sarah Whatmore, "Hybrid Geographies: Rethinking the 'Human' in Human Geography," in *The Animals Reader: The Essential Classic and Contemporary Writings*, ed. Linda Kalof and Amy Fitzgerald (Oxford, England: Berg, 2007), 344.

[34] Sutter, "The World with Us," 100, 105.

as NGOs, transnational businesses, and other organizations have gained influence with globalization after the collapse of the USSR.[35] Tania Murray Li calls for a concept (or reconceptualization) of the state in *international development* contexts that eschews traditional binaries over competitions for *power*. She sees "an array of authorities," including NGOs, which reshape the actions of subjects who have varying degrees of freedom. The state in southern Tajikistan's economic growth endeavors conformed to Li's definition: consisting of a range of institutions that influenced governance within particular territories through execution of projects.[36]

Whereas this perspective differs in general from common visions of the Soviet state writ-large, I also propose a peculiar view of the nature of its empire specifically. As an environmental managerial state, the USSR exerted its power in southern Central Asia within the limits of possibility imparted by the legacy of the native physical environment. The operations of this empire were characterized by authority diffused among different organizations, cooperating in varying degrees to complete economic growth projects through arrangements that were often ad hoc. As with any environmental history of problems and places that have mostly been addressed by other methodologies, my exploration of the dynamics and scale of the transformations the Soviet state conducted also contributes to a broader understanding of Soviet operations across its

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[35] Jonah D. Levy et al., "Changing Perspectives on the State," 6. Another body of work suggests that, from the standpoint of the global economy, the day-to-day nature of lending and borrowing has not changed significantly—though its scale has. See Levy et al., 7-9.

[36] Tania Murray Li, "Beyond 'the State' and Failed Schemes," *American Anthropologist*, vol. 107, no. 3 (September 2005): 383-394. More traditional analyses of states see such contexts of dispersed authority as a sign of state weakness, usually due to foreign intervention. See, for example, Peter B. Evans, "Transnational Linkages and the Economic Role of the State: An Analysis of Developing and Industrialized Nations in the Post-World War II Period," in *Bringing the State Back In*, ed. Peter Evans et al. (Cambridge, UK.: Cambridge University Press, 1985), 192-226.

geographic scope.[37] Stephen Brain has illuminated the need to encourage more historically grounded and complex understandings of the natural environment in Soviet history in terms of intention and practice across economic sectors, and not primarily based on industrial legacy.[38] Several scholars have argued convincingly for the view that the domination and exploitation of nature was part of the early Soviet, and especially Stalin-era, drive to radically transform society by way of industrialization. William Husband argues that "nowhere did the state undercut long-term objectives more heedlessly than in its approach to resources, where centralized state planning further disfigured inherently flawed designs to transform nature."[39] My goal is to explore how Soviet activities in pursuit of specific project goals corresponded to or were reflected by the physical, including the natural, environment in service of economic growth—and not Soviet *attitudes* towards nature.

I explore the environmental history of Soviet empire from the vantage of an unfamiliar aspect of economic life. The state materialized in the Tajik SSR because of importation and exchange made possible by growing networks of transportation and logistics. My emphasis on infrastructure and commodity chains highlights regional expressions of empire. Doing so adds new dimensions to the body of studies of Russian empire in Imperial Russia and the USSR. Recent contributions evaluate the relations and mechanisms of empire by studying rationales of state expansion through specific governing institutions and functions, building upon older studies of bureaucracy. They show that enactment of policy existed beyond autocrats or dictators in the

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[37] See Adam Rome's critique of histories of the USA that do not include an environmental history approach in "What Really Matters in History? Environmental Perspectives on Modern America," *Environmental History* 7, no. 2 (2002): 303-18.

[38] Stephen Brain, "Stalin's Environmentalism," *Russian Review* 69, no. 1 (January 2010): 94-95.

[39] William B. Husband, "'Correcting Nature's Mistakes': Transforming the Environment and Soviet Children's Literature, 1928-1941," *Environme*ntal *History* 11, no. 2 (April 2006): 309.

administrations involved in specific activities of state, and had independent impacts on the formation and outcome of policy.[40] This dissertation's focus on material change, however, is less interested in how the USSR was supposed to function from the starting point of policy, and more on how it actually worked in practice. It analyzes this problem from the position that empires successfully promote transfers and mobility of goods and people through processes typically referred to as trade and settlement.[41]

I illuminate material operations that facilitated those more ambiguous categories, following work that seeks to understand global and empire histories in terms of material conditions, networks, and mobility.[42] Gary Wilder's study of Negritude in imperial France, for example, argues that observing the physical connections and flows of empire dismisses simplistic dualities of traditional scholarship. He claims that "there were universalist and particularistic dimensions of republican and colonial poles of the imperial nation-state, each of which contained emancipatory and oppressive dimensions", so that historical work focusing on racism or colonialism, for example, as violations of an idealized republicanism ultimately fail to explore the actual operation of empire.[43] Wilder's vision of a concurrently global and local, progressive yet oppressive French state-empire resonates with my projected characterization of the USSR. My study of building in early Soviet Tajikistan intrinsically challenges traditional assumptions about the "metropole-periphery" spatial distribution of power in empires, and it is

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[40]See, for example, Robert Crews, *For Prophet and Tsar: Islam and Empire in Russia and Central Asia* (Cambridge: Harvard University Press, 2006); and "Forum: Colonialism and Technocracy at the End of the Tsarist Era", special section, *Slavic Review* 69, no. 1 (Spring 2010): 120-88.

[41] Frederick Cooper, *Colonialism in Question: Theory, Knowledge,* History (Berkeley: University of California Press, 2005), 197.

[42] See, for example, Tony Ballantyne and Antoinette Burton, *Bodies in Contact: Rethinking Colonial Encounters in World History* (Durham: Duke University Press, 2005); and Fernand Braudel, *A History of Civilizations*, trans. Richard Mayne (New York: The Penguin Press, 1994).

[43] Gary Wilder, *The French Imperial State: Negritude and Colonial Humanism Between the Two World Wars* (Chicago: The University of Chicago Press, 2005).

thus designed to contribute to scholarly literature of postcolonialism, in addition to that on imperial Russia and the USSR. As Adeeb Khalid argues, studies of Soviet Central Asia can "inject new caveats and perhaps a new skepticism toward generalizations built on the basis of the experience of mainly bourgeois, western European overseas empires."[44] In my dissertation, the capitals of Uzbekistan and Tajikistan, respectively Tashkent and Dushanbe, often played the role of metropole, representing Moscow as administrative centers, even though they are usually seen as its peripheries. My focus on physical context and connections situates state power in daily experiences and causes rather than hierarchies of peripheries.[45] In southern Tajikistan, authority in the quotidian operations of construction and transportation was often located in disparate villages and work camps, or in movement along roads.

This dissertation accepts the profound ambiguities produced in post-tsarist Central Asia by revolutionary change. The complicated relationship between state and empire that pervades the historiography of the USSR and modern Central Asia is especially concerned with questions about colonialism and nation. I follow Francine Hirsch's view that, while comparisons based in typology help complicate and fill in the picture of empire, they are rarely able to make clear connections between ideology and action, or political and physical experience of the events they address. "When it comes to discussing the unique form of the Soviet state and the nature of Soviet rule, ultimately all [comparative approaches based on colonialism and nationalism

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[44] Adeeb Khalid, "Locating the (Post-) Colonial in Soviet History", in *Central Asian Survey*, 26 (4) December 2007: 471. Studies of the USSR developed methodologies and concepts similar to those of "colonial" studies for overcoming comparable problems of analysis, including strategies for reading between the lines of official state documents. Stephen Kotkin's concept of "speaking Bolshevik", for example, is a form of what the postcolonial critic, Homi Bhabha refers to as "mimicry." Kotkin, *Magnetic Mountain;* and Homi Bhabha, *The Location of Culture* (New York: Routledge, 1994).

[45] See, Latour, *Reassembling the Social*, 182-91; and Madeleine Reeves, "Trace, Trajectory, Pressure Point: Re-imagining 'Area Studies' in an Age of Migration" (keynote speech to the 16th annual meeting of the Central Eurasian Studies Society, Washington D.C., 16 October 2015).

typology] have more descriptive than explanatory power."[46] I see the emergent USSR as a *postcolonial* empire, both temporally and analytically, rather than fixating on disproving Bolsheviks' claims to emancipating oppressed peoples in order to highlight *colonial* characteristics of the Soviet Union. In my view, it is more productive to acknowledge the coexistence of upheaval and novelty on one hand, and of continuing imperial, exploitative, and oppressive relations on the other, with both originating in Russia.[47] As in the decolonized states formerly comprising the British and French empires, many legacies of subjugation by Russia in Central Asia remained after the Bolshevik Revolution, and they were integrated with new institutions and identities. More recently, scholars differentiating themselves from the colonialism comparative school have preferred to conceive of Soviet Central Asia as postcolonial to highlight its post-tsarist temporality and the state modernization drive. Doing so frees the concept of imperial and subject agency from the limits of analysis in terms of *colonizer*, but need not relinquish the context of continuing neo-colonial exploitation that is widely acknowledged. Such studies are less static, emphasizing the rapidity and depth of Soviet change, and the potential of diverse actors. Scholars who explicitly evaluate Central Asians as similar to actors in other postcolonial contexts also, however, sometimes resort to superficial typologies.[48] Others avoid this by emphasizing comparison with histories of state-led modernization in different global contexts, such as those of Turkey and Iran in the 1920s and 1930s.[49]

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[46] Hirsch, *Empire of Nations*, 4. See also, Peter Robb, *Empire, Identity, and India: Liberalism, Modernity, and the Nation* (New York: Oxford University Press, 2007), 192-96.

[47] In Adeeb Khalid's most recent characterization, early Soviet Central Asia "hung between empire and revolution." See his, *Making Uzbekistan: Nation, Empire, and Revolution in the Early USSR* (Ithaca: Cornell University Press, 2015), 10.

[48] Please see: "Locating the (Post-) Colonial in Soviet History," ed. Adeeb Khalid, special issue, *Central Asian Survey*, 26, no. 4 (December 2007).

[49] Please see: Adeeb Khalid, "Backwardness and the Quest for Civilization: Early Soviet Central Asia in Comparative Perspective," in "The Multiethnic Soviet Union in Comparative Perspective," special forum, *Slavic Review* 65, no. 2 (Summer 2006): 231-51; and Adrienne Lynn Edgar, "Bolshevism, Patriarchy, and the Nation: The

This dissertation provides a postcolonial analysis that is committed to a clear operative—as opposed to symptomatic—concept of empire. It engages the material and economic life of an imperial state whose activities cannot be pigeonholed and dismissed along with other modern Euro-American empires as the result of capitalism's growth. I approach the question of *modernization* here the same way.[50] This dissertation is part of a larger set of studies concerned with modernization as a process, which typically sees global appropriations of rich world symptoms of modernity as the pluralization of its form. For most scholars, the modernization of economic growth is almost synonymous with *modernization theory*, which they (like myself) today see as having Eurocentric and imperialist implications.[51] Unlike virtually all of that literature, one difference of the Soviet context is that capitalism could only be construed most tangentially as the cause of a desire to modernize.[52] Thus, I address modernization as an aspiration of the Soviet state—rather than some imposition. The projects I engage are of a scale and quality that that are generally associated with modern history, projects, and economic growth. Moreover, the people implementing them at various levels of Soviet authority did so in a manner that was generally conscious of the idea that they were appropriating practices, technologies, and goals modeled on those of other countries with larger economies, but altered for a Soviet context. For this reason, I identify with Michael David-Fox's desire to avoid models,

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Soviet 'Emancipation' of Muslim Women in Pan-Islamic Perspective," in "The Multiethnic Soviet Union in Comparative Perspective," special forum, *Slavic Review* 65, no. 2 (Summer 2006): 252-72.

[50] Skocpol, for example, sees the character of states as the result of transnational economic and political relations is skeptical about the degree to which the form of a domestic economic system or models of modernization affect the success of the state. See, *States and Social Revolutions, 19-22, 291.*

[51] James Ferguson, for example, holds to such a view despite his recognition that it was a new formulation of ideas about progress that were at least as old as nineteenth century imperialism. See, *Expectations of Modernity: Myths and Meanings of Urban Life on the Zambian Copperbelt* (Berkeley: University of California Press, 1999), 247-54. Studies of other periods posit very similar critical approaches to Euro-American participation in economic and technological change abroad. See, for example, Jessica B. Teisch, "California Welcomes the World," introduction in *Engineering Nature: Water, Development, and the Global Spread of American Environmental Expertise* (Chapel Hill: University of North Carolina Press, 2011), 1-16.

[52] Cooper, *Colonialism in Question*, 126-27.

and to reframe aspects of modernity as a "lens" for examining Soviet history, rather than as a qualitative value-judgement.[53] I am not denying modernity's implications or contradictions, but attempting to move beyond an unresolvable debate. The study of Russia and the USSR, David-Fox argues, "would benefit from grappling more directly with the concept of multiple modernities." This perspective accepts that there is no single road to modernity, and it takes emphasis off of the so-called western world as a model.[54]

This dissertation demonstrates that multiple modernities also existed within the USSR. The example of Tajikistan examined here furthermore shows there were also multiple versions of the Soviet state, each with its own distinct history. Chapter 1 grapples with the challenge of reconciling the economic starting point of the Tajik SSR in the 1920s with the massive changes taking place throughout the USSR. It examines the construction of Tajikistan's first railroad and the meaning that its completion in 1929 had for physically connecting the republic to Soviet—and historiographic—narratives, as well as to Union transportation networks. The completion of the railroad, at least two years late, arrived just months before Tajikistan's independence. It facilitated greater efficiency in imports, and thus enabled significant changes in the scale and intensity of economic activity. The primary justification for constructing the railroad had been its anticipated role in economic growth of the republic's southern regions. Tajikistan marked its newfound political status by giving its capital Dushanbe the name of Stalinabad to honor the new leader of the USSR, Joseph Stalin.

The republic needed roads in order to enable commodity distribution. Chapter 2 engages the way that the experience of *roadlessness*—as officials referred to it—impacted the

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[53] Michael David-Fox, *Crossing Borders: Modernity, Ideology, and Culture in Russia and the Soviet Union* (Pittsburgh: University of Pittsburgh Press, 2015), 7.

[54] David-Fox, *Crossing Borders*, 2-8.

prioritization of mobility infrastructure among economic projects. The roadless legacy of Tajikistan's physical environment was a key obstacle to the pace and scale of desired activities. My case study of the Stalinabad-Qurghonteppa road project demonstrates that the Soviet state accommodated material limits on possibility by giving up on making it a railroad, the preferred form of mobility. Officials instead opted for a highway, deciding that roads were a more expedient form of infrastructure in Tajikistan's mountainous territory.

Chapter 3 examines how commodity chains worked as new opportunities for mobility were being formed. It shows that efforts to import cargo in order to facilitate the construction of a new built environment faced challenges in institutional cooperation because logistical relationships were as incomplete as the construction projects they supported. At a time when the government in Moscow endeavored to centralize control of economic operations, shipping services that sustained economic growth in Tajikistan were characterized by ad hoc, and often illegal, activities. The world of Soviet mobility in Tajikistan was comprised of relationships and activities that are unfamiliar to the history of the USSR. In fact, most of the transportation at local levels was achieved by pack and draft animals that were better suited to the republic's roads. In Chapter 4, I argue that the state's management of horses and camels, most notably through institutionalization of breeding with in the republic, was a form of Soviet modernization in Tajikistan of the 1930s. From the perspective of transportation, the history of Soviet state in Tajikistan reflected a different version of modernity from the automotive vehicle-obsessed ideals known from the more familiar historiography; it also had a different narrative, mobility landscape, and forms of economic authority.

Chapter 5 picks up on these findings in a case study of a railroad constructed for an agro-industrial cotton complex in Tajikistan's Vakhsh River valley. It analyzes the developing

connection of this infrastructure to changes occurring in the region due to resettlement and economic growth. I find that, because of the peculiar conditions of Tajikistan's landscape of mobility, and its unorthodox shipping relationships, this railroad attracted unplanned usage. Because of its relative reliability as a platform for movement in a place where there were few, commodity chains gravitated to the line, giving it importance to the changing built environment of the valley of a scale that shaped the developing geography of Soviet statehood under Stalin in Tajikistan's southern regions.

State building is physical as well as political. In addition to organizing government bureaucracies, laws, enterprises, and policies, it is also done through assembling the infrastructures and material exchanges that serve them. Soviet planners of Tajikistan in the 1920s and 1930s envisioned new factories, roads and canals, schools, hospitals, libraries—even whole towns and cities. They believed that this infrastructure would facilitate a modern industrial economy that could support a government of welfare, and a classless society where women and men lived as equals who freely expressed and protected national and ethnic identities. The socialists also, however, found that the basic materials needed to constitute this desired physical environment were lacking in the republic. Their ambitions were thus dependent on capital originating beyond Tajikistan's borders.

CHAPTER 1

SOVIET LAND BY RAILROAD: CONNECTING SPACE AND TIME IN 1920s TAJIKISTAN

> "At present, the economy of Tajikistan is to a significant degree closed and natural [*zamknuto-natural'noe*]. This results from the fact that Tajikistan has no good routes of transportation linking it to the outside world. Moreover, we have within Tajikistan itself a series of separate regions that are very poorly connected to one-another for this reason: the virtual absence of roads. The task of overcoming the disconnection of Tajikistan from the outside world and of consolidating of all of its parts into a united economic whole, this task is fundamental to the economic and political development of the young republic."[1]
>
> ———*Narodnoe khoziaistvo Tadzhikistana*

Officials of the Tajik ASSR's State Planning Committee (Gosplan) who authored this statement believed they faced rare challenges. They were introducing a book of essays on their agency's mandate to establish the Soviet economy in Tajikistan. In it, they claimed that basic problems in institution building were hampered by even more fundamental challenges in the management of physical geography. Gosplan's position resonated with views of personnel from many organizations and regions. As I will demonstrate, state representatives from Moscow to Dushanbe, as well as managers and laborers at worksites throughout southern Central Asia and Tajikistan agreed that economic projects in the new republic were inhibited by location and limited possibilities for mobility. Many such statements, like that of the Gosplan book, were produced more than a year after the Tajik ASSR's creation. The fundamental problems they described were at odds with the statehood suggested by Tajikistan's official status as a defined, semi-autonomous territory.

[1] Komissiia Sredne-aziatskogo ekonomicheskogo biuro po delam Tadzhikistana, preface in *Narodnoe khoziaistvo Tadzhikistana* (Izd. Gosplana Tajik ASSR, 1926), ii.

In this chapter, I explore this disjuncture between political and economic geography by analyzing the construction of the first railroad in the republic. The line was built between 1927 and 1929, from the city of Termez, on Uzbekistan's border with Afghanistan, northeastward to Dushanbe. I argue that the activities associated with establishing the Termez-Dushanbe Railroad revealed practical realities undermining the superficial autonomy accorded by the national territorial delimitation (NTD) of 1924. As I will show, and as personnel involved in economic projects knew, Tajikistan without a railroad was physically disconnected from sources of capital like feedstock, which were located in other Soviet regions. The construction of the line was a complicated process involving continuous uncertainty and negotiation among individuals who spanned Central Asia and the Soviet Union. This persistent contingency, I contend, made the completion of the railway a founding achievement of the Republic of Tajikistan on par with its political creation.

The Termez-Dushanbe Railroad represented a solution to a set of practical problems that many officials knew by the spatial byword, *isolation*. The term encompassed the lack of an adequate connection to state administrative and material support, which frustrated efforts to implement Soviet plans in Tajikistan. I analyze two factors at stake in overcoming Tajikistan's isolation: first, the republic's realization as a producer within the socialist economy; and second, this space's involvement in the futurity of the USSR. In the 1920s, officials increasingly felt that a railroad was critical to overcoming isolation because of real and teleological ramifications.

Officials were concerned that challenges of the formative stages of economic growth were exacerbated by the lack of a reliable transportation. Tajikistan began its very existence at the pleasure and direction of institutions in other regions of the USSR. From them, it received all forms of sustenance: policy and plans, financial support, building materials, equipment, laborers

and draft animals, experts and expertise.[2] In such a context, Gosplan Tajikistan's book could only present Soviet economic growth ambitions in the republic in a way that was daunting because of the scale and number of tasks. Infrastructure and transportation, however, were central to their vision of change within the republic.

> The population of Tajikistan is poor, but [changes in] objective conditions would allow the population to significantly improve its well-being. The realization of a railroad, the improvement of waterways and [in general] ways of communication, the cultural and economic work of cotton growing, the development of government procurements and government trade, the enlargement of the work of credit agencies, the development of the independence of the population and different economic sectors through cooperation and the collectivization of production processes.[3]

This prioritization of railroads among state tasks was typical in the documents I analyze, even though the republic's economic identity had little to do with mobility. Officials across sectors shared the view that the unique conditions imparted by the territory could only be altered by economic growth if this land were linked to the rest of the USSR by a suitable built environment and modern forms of transportation.

Soviet officials' regular claims about the desperate needs of the residents of Tajikistan, however, was more a comment on the fragility of state capacity and ambitions within the territory. The native population that resided in the republic's southern regions during the 1920s was sustaining itself through livelihoods that survived the upheavals of the revolutionary era. Prior to Soviet governance, most of the land that would become Tajikistan was a provincial region within the Amirate of Bukhara that was usually called East Bukhara—a term that

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[2] Nazrulloev goes so far as to note that, at the time of his writing, the relationship of Tajikistan to the USSR was the same. See S. Nazrulloev, *Dorozhnoe stroitel'stvo i razvitie transporta v Tadzhikistane, 1917-1941 gg.* (Dushanbe: Izdatel'stvo "Donish," 1979), 5; Ia. T. Bronshtein, "Opyt likvidatsii bezdorosch'ia i sovremenaia strategiia razvitiia transporta Tadzhikistana," *Izvestiia AN respubliki Tadzhikistan* 3, no. 7 (1987): 44; and R. M. Masov, ed., *Noveishaia istoriia (1917-1941)*, vol. 5 of *Istoriia tadzhikskogo naroda* (Dushanbe: Institut istorii, arkheologii i etnografii im. A Donisha AN respubliki Tadzhikistan, 2004), 376, 420.

[3] *Narodnoe khoziaistvo Tadzhikistana*, ii.

continued to be applied to Tajikistan's southern regions even after the NTD. East Bukhara's economy had been closely tied to that of the Amirate of Bukhara. It also involved low levels of trade with South Asian interests, especially related to goods transiting Bukhara between Russia and destinations in Afghanistan and India. Following Russian conquests in Central Asia during the 1870s, Bukhara's protectorate economy became attached to its colonizer's. All of the Amirate was to some degree dependent on Russia for all forms of primary and especially processed resources, from bread to metals.[4] East Bukhara's economy, especially in the post-tsarist period, was characterized by the stability of subsistence agriculture and livestock breeding.[5]

Soviet experts and planning bodies imagined that Tajikistan with better transportation links could most rapidly come to participate meaningfully in the economic life of the USSR if the republic were developed as a base of raw materials already known or thought to flourish there. Cotton production became the main ambition, especially in southern regions. I. E. Khodorov argued that the Amu Darya River region, especially, had a "great economic future." In his view, the combination of soil, climate (the vegetative period and heat), and irrigation conditions was better there than elsewhere in Central Asia.[6] Livestock rearing would also be important because it was already well established, and had twice the share of local economy as elsewhere in Central Asia. Many also assumed that Tajikistan likely had great mineral wealth in

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[4] Internal report on "The Turkestan Republic and Adjacent Countries," addressed to the Turkestan Commission, copy attributed to B. I. Dolgopolov (Deputy Head of the Historical-Diplomatic Section of the Office of External Affairs in Turkestan under the People's Commissariat of Foreign Affairs of the RSFSR), 6 July 1921, Russian State Archive of Social and Political History (*Rossiiskii gosudarstvennyi arkhiv sotsial'no-politicheskoi istorii*; hereafter RGASPI), f. 122 (Administration and Personal Affairs of Employees of the Central Executive Committee and Council of People's Commissars of the Russian Soviet Federative Republic on Affairs of Turkestan), op. 4 (1918-1924), d. 56, ll. 56a-57a (full document is ll. 55a-57b).

[5] Masov, ed., *Noveishaia istoriia,* 418.

[6] I. E. Khodorov, "Perspektivy khoziaistvennogo razvitiia Tadzhikistana," in *Narodnoe khoziaistvo Tadzhikistana*, 343.

the form of gold, coal, asbestos, salt, and others. But little was known about which was out there, in what quantity, where they were, or how to obtain them.[7] Soviet discussions on economic growth in the 1920s and 1930s derived plans from incomplete understandings of extant forms of economic activity and other opportunities that geography permitted.[8] Planners decided to focus on the southern regions because of a decision to concentrate energy on the production of cotton. The uptake in economic activity that occurred after the Termez-Dushanbe Railroad ended Tajikistan's isolation from the USSR is demonstrably related to the new possibilities for importation that the route afforded. Soviet officials had correctly anticipated the impact that rail would have on the economy of Tajikistan, and on the viability of the republic as a project.

This physical solution had also been directed at the second implied problem of isolation. Overcoming Tajikistan's remoteness by rail would improve the territory's relationship to Soviet time. In the 1920s, the republic's isolation represented its tenuous connection to the USSR's teleology of nations. It was an understanding that indicated the need to reconsider conventional narratives of Soviet history to account for material life. Social change, as Allan Pred observes, always involves some struggle "over the use and meaning of space and time."[9] When Tajikistan was created in 1924, it was a liminal Soviet space where revolutionary aspirations encountered physical challenges to the future. The introduction in the Gosplan book, for example, contains a detailed glorification of Tajikistan as the deserved homeland of the "Iranian peoples of Soviet

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[7] According to Khodorov, livestock production consisted of about 21.8 percent of the agricultural economy of the rest of Central Asia, for Tajikistan it was about 56.1 percent. Khodorov, "Perspektivy," 343. See also, Teresa Rakowska-Harmstone, *Russia and Nationalism in Central Asia: The Case of Tadzhikistan* (Baltimore: The Johns Hopkins Press, 1970), 32-37; and Iu. Rakitin, "Respubliki i Oblasti Srednei Azii.," *Sredne-aziatskie sovetskie respubliki: Promyshlennost', torgovlia, financy i transport: Prilozhenie no. 4 k zhurnalu Predpriiatie* (June 1925): 12-17, 29-32.

[8] Khodorov, "Perspektivy," 343; and Rakowska-Harmstone, *Russia and Nationalism in Central Asia,* 32-37.

[9] Italics in original. Pred, *Making Histories*, 12.

Central Asia," who "do not only have a rich past; they undoubtedly have a great future."[10] The authors of these lines, like those of many of the other sources I draw on in this chapter, were seeking to match their discussion of the nuts-and-bolts of planned economic growth in Tajikistan to an ideological context that had led to the formation of this republic in the first place. Like other commentators, they saw this national republic more as an idea than a reality because of its material conditions. This perspective led a contemporary to write that "there are two Tajikistans: one is of the past, and the other is of the future."[11] In the larger context of this formulation, the past and future were separated by the deplorable *present* that manifested in the republic's physical isolation from the rest of the USSR. As long as its remoteness persisted, Tajikistan would also be separated from the historical trajectory of the Soviet state building project. Andrew Abbott explains that for many relationships to time the 'present' is a space "between endless past and future." Much like the time passed in isolation that Soviet officials associated with southern Tajikistan, the current moment was to Marxist-Leninist teleology suspended in almost "nothingness, the present an island of reality in a sea of ideation."[12] Many economic planners saw the task of overcoming Tajikistan's physical disconnection from the USSR as a way of facilitating the future and bringing the autonomous republic into the orbit of Soviet aspirational time. The construction of reliable transportation links would bring the Tajik ASSR into the narrative project of the USSR as an intentionally changing physical presence.

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[10] Komissiia Sredne-aziatskogo ekonomicheskogo biuro po delam Tadzhikistana, preface in *Narodnoe khoziaistvo*, i.

[11] Iu. I. Poslavskii, "Ekonomicheskii ocherk Tadzhikistana," in *Tadzhikistan: Sbornik statei; S kartoi*, ed. N. L. Korzhenevskii (Tashkent: Obshchestvo dlia izucheniia Tadzhikistana i iranskikh narodnostei za ego predelami, 1925), 179.

[12] Andrew Delano Abbott, *Time Matters: On Theory and Method* (Chicago: University of Chicago Press, 2001), 239.

The Termez-Dushanbe Railroad was completed in September 1929, just before Tajikistan was upgraded to the status of a full Soviet republic in December. The finished route facilitated possibilities for movement that helped materially conceive the political geography imagined half a decade earlier. The timing of the completion of this railroad, and the permanent physical state presence that it enabled, call into question periodizations of Soviet history writ-large. The major historical works of nationality in the early Soviet period disagree on the timeline of state formation—a result of further disagreement on how this 'formation' worked in practice—but they agree that it happened during the 1920s. Francine Hirsch's analysis of the role of economic considerations in the formation of the USSR leads to her view that, in the 1920s, "the USSR was a work in progress." She positions herself against most "classic works," pointing out that they "describe a [Bolshevik] party with decisive leadership and clear aims," so that they emphasize certain central state proclamations of policy as indicators of action.[13] Richard Pipes argues that the USSR had more or less taken shape once the constitution of the USSR was inaugurated in 1924, defining the hierarchy of relationships among Union-level agencies, between them and those of republics, and among those of republics.[14] Terry Martin is less decisive about dates; he describes a process by which the national relationships that came to define the USSR were not only cultural, but established through proclamations of central agencies, as opposed to negotiation.[15] Hirsch, rather differently, highlights the debates that informed or followed policy-making. She shows in detail that the formation of the USSR's regions was a process that took into consideration and was influenced by factors at Union-wide as well as local levels, and that it

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[13] Francine Hirsch, *Empire of Nations: Ethnographic Knowledge And The Making of the Soviet Nation* (Ithaca: Cornell University Press, 2005), 65.

[14] Richard Pipes, *The Formation of the Soviet Union: Communism and Nationalism, 1917-1923*, 2nd ed. (Cambridge: Harvard University Press, 1964), 276.

[15] Terry Martin, *The Affirmative Action Empire: Nations and Nationalism in the Soviet Union, 1923-1939* (Ithaca: Cornell University Press, 2001).

was realized not only by handful of elite cadres but by a wide range of personnel found across its massive landmass and bureaucracy. Focused on how policy level discussions and the "production of knowledge"—especially ethnographic knowledge—influenced border-making, she argues that state formation was a "conceptual conquest" of Soviet land that was completed around 1929.[16]

I believe that *real conquest* in the form of instituting government agencies settled officials, built environment, and economic activity provides a more precise way to periodize the establishment of the state in regions (though, the term "conquest" misrepresents the permanence and progression that I see as state building). Periodizations that emphasize politics of nationality misrepresent how Tajikistan and other regions experienced Soviet state building. Such scholarship promotes narratives that speak only for central and top authorities. They ignore E. H. Carr's cautionary note about the vast diversity of Soviet regional experiences. He highlights Central Asian conditions as having been very different from other parts of the USSR; Tajikistan's, he shows, were unique among them all. The Autonomous Republic lacked basic infrastructures needed to establish governance in 1925, with no railway or adequate housing for offices or board. "These conditions make it *unusually clear* that it is dangerous and inappropriate to generalize about the character and working of Soviet institutions, even those bearing the same name and possessing the same formal functions, throughout the vast and diverse expanse of the USSR."[17]

From the perspective of the material, 1929 had a very different significance for Central Asia. The completion of the Termez-Dushanbe Railroad signaled the end of Tajikistan's physical

[16] Hirsch, *Empire of Nations*, 12.

[17] Italics Inserted. Edward Hallett Carr, *Socialism in One Country, 1924-1926*, vol. 3, part 1 (New York: Macmillan, 1958), 271-72.

isolation from the rest of the USSR thanks to reliable access to comprehensive support. My view of state power relations across space in material terms draws on Pred, who argues that "regardless of whether they involve exploitation, domination, or subjection, cannot be separated from the realm of actual or potential behaviors, from situated actions and practices."[18] I argue that changes in the construction of the Termez-Dushanbe Railroad can be read as the history of Soviet state building in Central Asia—as did the officials who authored the documents serving as my sources. It was an environmental management project *in-progress*.

Legacy and Isolation

No whim led Soviet officials to conclude that the land appointed to Tajikistan in 1924 was isolated from major processes of economic change. The idea was informed by revolutionary and socialist personnel involved in concerted efforts to alter the economy of this space from the start of the post-tsarist era to 1929, while political institutions and borders of Central Asia changed several times. Observers' and authorities' opinion that overcoming the remoteness of Tajikistan's territory was a prerequisite to the desired scale of economic growth was a view formed on the basis of various kinds of evidence. In this section of the chapter, I analyze how state representatives situated in the region corroborated scientific characterizations of the republic as a dislocated space needing external connection. I show that both groups view of economy led them to perceive problems in the physical phenomena that are signposts for a new narrative of Soviet state building beyond politics.

[18] Pred, *Making Histories*, 12.

Soviet officials understood the republic's current and previous scale of economic activity in deterministic geographical terms that confirmed calls for transport development. After the NTD, a foremost concern of planners was the manner in which the native physical environment itself isolated Tajikistan. This problem was most often understood in terms of effect on commodity chains: the Soviet government's inability to maintain reliable, intensive contacts between Tajikistan and other regions of the USSR inhibited the movement of goods and people. The primary effect was a prohibitive limit on imports necessary to growing the economy in general. Secondarily, Tajikistan would be unable to share any of its future economic products with other republics. Officials saw new transportation infrastructure as the way to overcome the isolation inherent in the physical legacy of the territory of Tajikistan.

Geographic determinism focused especially on the topography of this land, and the claim that this factor had limited the possible forms of economic life to low intensity activity. For the Soviet geographer, Iu. Poslavskii, the "rustic character of Tajikistan expresses itself...in the forms of organization of production."[19] To him, the "physical and geographical conditions" of Tajikistan were the reason that it lacked incidental industrial centers dependent on mineral resources. His most instructive observations came from comparison to other Soviet places. The economy of the land becoming Tajikistan, he claimed, was very different from the middle and lower level industrial and trade activities of the societies on such major river regions as the lower Amu Darya and Zerafshan, as well as from the nomadic herders of the Kazakh steppe, and the intensive agricultural regions of the Russian steppe. It also lacked the kinds of plains found in Uzbekistan, with their incidentally populated crop areas.

> Along with this, the Tajik population's distance from cultural regions, and its confinement in hard-to-reach mountain ravines and valleys prevents extensive nomadic

[19] Poslavskii, "Ekonomicheskii ocherk Tadzhikistana," 186.

> economic activity and the use of vast pasturable spaces. Here, they are more limited to rain-fed lands and irrigated lands. Cramped between the slopes of mountain ranges close to impassible mountain streams or shallow mountainous piedmonts on the border of deserts (Uroteppa, parts of the Qurgonteppa and Kulob vilaiats), deprived of the possibility for permanent and free economic relations with other economic centers of Central Asia, the population of Tajikistan developed a distinctive style of economy...the population directs its energies only on those resources which are easily found on the surface of the earth...[but] nevertheless hard to obtain.[20]

Later, some historians would argue that Tajikistan's territory's relative proximity to Silk Road caravan routes included it in global trade networks. Such claims, however, were first of all rather overstated, and furthermore usually emphasized the northern regions of the country, particularly the plains around Khujand (known as Leninobod in the Soviet era), which were officially not part of the republic until 1929.[21]

Deterministic understandings of Tajikistan's isolation were also informed by its weather. Precipitation and such weather events as flooding and avalanches easily interfered with the dirt roads and paths used to transport goods into and throughout the republic. These challenges were especially common and troublesome from late fall to mid-spring when most kinds of large-scale goods exchange stopped. From about November to March, an internal memo stated, "mass transport of goods is almost impossible."[22] Improved transportation infrastructure, it was thought, would help overcome productivity problems related to the delays in commodity exchange caused by seasonal variation. Some commentators also claimed reliable trade routes

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[20] Poslavskii, 187. See also, Professor V. A. Vasil'ev, "Section 1: A Brief Description of the Physical Geography of the Region," in "Regarding the Impending Transportation Construction, Improvement and Use of Water Forces in Central Asia," 1st ed., 1926, Russian State Archive of the Economy (*Rossiiskii gosudarstvennyi arkhiv ekonomiki;* hereafter RGAE), f. 4372 (State Planning Committee of the USSR (Gosplan), op. 15 (Section for Regionalization, 1921-1931), d. 902, ll. 125a-120a (full document). Inverted pagination in archival citations reflects the original pagination in the files themselves.

[21] See, for example, Iusufi Shodipur, "Avtoreferat. Istoriia putei soobshcheniia i transporta Tadzhikistana vo vtoroi polovine XIX - nachale XX v.," (Dushanbe: Tadzhikskii gosudarstvennyi universitet, 1992), 12.

[22] "Plan for Trade," n. d. (1925), Central State Archive of the Republic of Tajikistan (*Tsentral'nyi gosudarstvennyi arkhiv respubliki Tadzhikistan*; hereafter TsGART), f. 19 (State Planning Committee of the Tajik ASSR), op. 1, d. 504, l. 61a (full document is ll. 61a-69a).

could help establish Tajikistan as a zone of intensifying trade between other SSRs and neighboring foreign countries.[23]

Such studies of geography and environment were often made after or by individuals who had only visited Tajikistan. They nevertheless resonated with the reported experiences of state representatives who communicated with institutions throughout the USSR. Such individuals, whether they visited or were situated in Tajikistan, often phrased their observations in more familiar political terms. Some, for example, pointed out to the paradoxical effects of isolation on East Bukhara during the Russian civil war. Russian Communist Party officials speculated that it was "one of the most devastated and impoverished Soviet regions."[24] Its remoteness from sectors of Soviet authority made its recovery particularly difficult. Authorities believed that East Bukhara's continuing isolation perpetuated the stunting of a broad range of economic and social institutions, along with the population in general. The post-tsarist conflict featured a mass exodus from regions around and south of Dushanbe which, along with revolutionary disruptions had broken the personal networks of such elites as bais that had propped up local, cross-sectoral trade with lands to the west and north prior to the revolution.[25] Mobility problems separating East Bukhara from Central Asia and Russia limited the flow of commodities and people, and thus slowed recovery under the Soviet regime.

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[23] See Khodorov, "Perspektivy, 344.

[24] "Informational Letter of the Organizational Bureau of the Communist Party of the Tajik ASSR on the Months of January-February 1925," signed by P. P. Sokolov (former Executive Secretary of the Tajikistan Orgbiuro) and Kamen'kovich (Assistant to the Secretary of the Office of Information of the Central Committee [of the Communist Party of Tajikistan]) on 20 March 1925, and sent as an "absolutely secret copy" from the Office of the Secretary of the Central Committee of the Russian Communist Party to its Office of Information on 25 April 1925, RGASPI, f. 17 (Central Committee of the Communist Party of the USSR, 1898, 1903-1991), op. 33 (Correspondence of the Office of the Secretariat and the Secret Section for local party organizations, 1920-1929), d. 444, l. 52 (full document is ll. 47-64).

[25] Poslavskii, "Ekonomicheskii ocherk Tadzhikistana," 228.

The state's fragility in East Bukhara was further reflected in its representatives on the ground. The region was included in the Bukharan National Socialist Republic (BNSR) formed in 1920 after the Red Army defeated Amir Alimkhan and captured the Amirate of Bukhara. Due to the USSR's lack of presence, resources, and enforceable authority in East Bukhara, its representation there consisted of a temporary governing agency known as the Extraordinary Dictatorial Commission of the Bukhara Central Executive Committee.[26] At the beginning of 1924, this agency was re-organized and renamed the East Bukhara Central Committee (hereafter, EB TsIK), answering to the Central Committee of the BNSR. The EB TsIK was an unstable, improvised operation, which contemporaries characterized as having unorthodox structure and lacking distinct organs of government. For this reason, it could not offer an institutional basis for governance of the Tajik ASSR in 1925.[27]

The recorded experiences of EB TsIK agents before delimitation are replete with complaints and despair at their real and imagined isolation from their government—the BNSR—and country—the USSR. In their perceptions, East Bukhara was not a priority of authorities based in Bukhara city or in more important centers of Soviet power like Tashkent and Moscow. An August 1923 EB TsIK report to the Central Asia Bureau explained that efforts to establish socialist forms of economy (*kooperatrabota*) as well as Soviet governing institutions had almost entirely failed despite two years of effort.[28] The cause of slow progress was the lack of material

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[26] Paul Bergne, *The Birth of Tajikistan: National Identity and the Origins of the Republic* (New York: I. B. Taurus, 2007), 32.

[27] A. Ianishevskii, "Sovetskoe stroitel'stvo v Tadzhikistane," in *Narodnoe khoziaistvo Tadzhikistana* (Izd. Gosplana TASSR, 1926), 201.

[28] Report titled "Bukhara," addressed to Comrade Rudzutak, copy attributed to the Deputy Head of the Office of Information and Instruction, 11 August 1923, RGASPI, f. 17, op. 84 (Bureau of the Secretariat of the Central Committee of the Russian Communist Party, 1918-1926), d. 507, ll. 59b-61a (full document is ll. 59a-64a).

and financial support, and the "significant lack and shortcomings of workers."[29] Messages such as these often made recommendations for improving the situation. A later report requested a concerted effort to improve regional transportation in order to overcome the "detachment and isolation of East Bukhara," and to bring the region into closer cooperation with "the west" (Bukhara proper).[30]

While such reports couched authorial frustration in terms of challenges to goal attainment, they sometimes revealed the effects of isolation on morale. Officials posted in these southeastern lands felt they were on the periphery of the periphery. East Bukhara was at best a secondary concern of upper-level personnel elsewhere in Central Asia. One EB TsIK official felt abandoned to work on monumental tasks and and live in trying conditions. In a letter to the Bukhara TsIK, he expressed dismay about the apparent futility of his previous letters. "I think that, if you sent me to East Bukhara, then I must have been [seen as] needed in the work here. And that is why I am quite surprised at the lack of letters and telegrams from you. It [this state of affairs] amounts to fully ignoring East Bukhara and myself, and this should not be."[31] From the perspective of EB TsIK operatives, the land that became Tajikistan was at the end of the line in real space, as well as when it came to Soviet priority and support. According to one contemporary, these conditions of the early and mid-1920s "made it impossible to effect the same tempo of Soviet state building [*sovetskoe stroitel'stvo*] that was taking place in other regions of Central Asia and the USSR."[32] When Tajikistan inherited the land of East Bukhara,

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[29] RGASPI, f. 17, op. 84, d. 507, l. 61b.

[30] RGASPI, f. 17, op. 84, d. 507, ll. 66a-b.

[31] Report addressed to N. Khojaev (Central Committee of the Communist Party of Bukhara), translated copy, author unknown, n.d. (1922-1923), RGASPI, f. 17, op. 86 (Bureau of the Secretariat of the Central Committee of the Russian Communist Party, 1918-1934), d. 134, l. 6a (full document is ll. 6a-7a).

[32] Ianishevskii, "Sovetskoe stroitel'stvo v Tadzhikistane,"201.

problems related to isolation—such as extreme material shortages, delays in the opening of credit, and poor connection by post and telegraph—continued. The Soviet state remained unable to secure its position and change the local economy because of a lack of capital of the kind needed for construction and for the sustenance of settlers.

This material context was more important and consequential than can be surmised from the historiography of Central Asia, and especially the literature of the NTD. Scholarly emphasis on military and especially political achievements neglect the degree to which physical conditions were interwoven with security and institutional challenges. In the prevailing scholarly narrative of Tajikistan, the delayed establishment of political institutions is attributed to popular resistance, especially from rebel fighters known as Basmachi. In one representative iteration of this view, statehood came to Tajikistan "thanks to the successes of military-repressive [*voenno-represivnykh*] campaigns."[33] Such narratives, however, rarely connect the challenge posed by the rebels to the constellation of tangible problems at work in this land during the 1920s. Material obstacles included the lack of transportation infrastructure, an economy that did not sustain Soviet ambitions, a shortage of available and trained labor, and a profoundly traumatized native population.[34]

The Basmachi thrived in these circumstances because socialist officials of East Bukhara and Tajikistan lacked physical means for altering them, and had limited opportunities for persuading native inhabitants to enjoin them. In fact, the nexus of Soviet material wealth, relations with the native population, and isolation, was closely associated with the persistent threat from the Basmachi. EB TsIK representatives within East Bukhara were not only under-

[33] Masov, *Noveishaia istoriia,* 382. See also, example, Rakowska-Harmstone, *Russia and Nationalism*, 30-31.
[34] Rakowska-Harmstone, *Russia and Nationalism*, 31.

supplied and under-staffed; they also had poor relations with the few natives among whom they could find allies in the conflict. In 1923, for example, an official complained that, beyond such regions of strength, such as Dushanbe *vilaiat* (province), temporary governing organizations known as *Revkoms* (Revolutionary Committees) were not very effective. These were responsible for maintaining sufficient supplies and housing for state officials or military detachments that might pass through, but their efforts were significantly hampered by the considerable depopulation of many regions, and the almost absolute decline of local agriculture.[35] This individual argued that the only way to improve matters would be to import many more personnel and supplies. A large number of staff, in particular, were needed since those who were present are stretched to the limit working "from morning to night," most of them in two or three capacities, and many of them alone much of the time in rebel territory. Furthermore, the labor shortage was exacerbated by environmental threats to cadres' health. "All this is would be manageable were it not for the illness of [Comrade] Rafikov and my frequent trips to this region or the other. To boot, almost all officials suffer from malaria."[36]

The material and administrative weakness of the Soviet regime in East Bukhara and Tajikistan also exacerbated challenges to gaining the trust and allegiance of native peoples. A core part of the offensive against the Basmachi was economic and material: an appeal to native communities' "hearts and minds" through financial as well as food aid. Such shows of wealth acted as incentives for natives' passive support or, preferably, actively joining the Socialist regime.[37] This kind of trust was hard-won, and by no means widespread until the 1930s. The Red

[35] RGASPI, f. 17, op 84, d. 507, l. 68b.

[36] Notably, "rafiq" is the Tajiki word for "comrade." RGASPI, f. 17, op. 84, d. 507, ll. 68b-69a. The author concluded by commenting on his worries about how to delegate tasks to this workforces during his own pending travels to have an operation performed on an open wound in his leg.

[37] Rakowska-Harmstone, *Russia and Nationalism*, 30-31.

Army offensive in Central Asia, known as the Turkfront, was mostly composed of Russians. It came to be resented by the local population of Tajikistan since it was associated with half a decade of violence and depredation that had washed over the land in fighting with the Basmachi as well as, earlier, with armies of regional princedoms. The Russians were seen as callous occupiers who—like the rebels—obliged natives to provide them with all forms of resources, including limited food and lodging.

Most scholarship follows a narrative by which, after NTD, local Communist Party organizations are foregrounded and presented as the solvers of state building problems like rebels, and as the drivers of historical change.[38] State agencies are presented as overcoming "exceptionally difficult and complicated conditions" of Basmachi resistance and devastated economy that delayed crucial founding events of the Republic of Tajikistan. Following political signposts, this argument promotes the view that only in August of 1926 did authorities come to feel confident enough vis-à-vis the rebels to announce fall elections to Soviets, which would replace Revkoms.[39] Following the elections, this story goes, the First Founding Congress of Soviets of Workers, Peasants, and Red Army Deputies took place from 1-12 December 1926. On the first day, the congress declared their *native* approval of the creation of the Tajik ASSR, and (somewhat ironically) "'the adamant decision for the voluntary entry into the Uzbek SSR, and through her the USSR with all the rights of an autonomous republic.'"[40]

My research shows that the path to stabilization and the establishment of soviets in Tajikistan involved considerably more than fighting off Basmachi rebels. The delayed elections

[38] Masov, ed., *Noveishaia istoriia,* 396-400.

[39] Masov, ed., *Noveishaia istoriia,* 382, 396-97; and Rakowska-Harmstone, *Russia and Nationalism*, 30-31.

[40] Masov, ed., *Noveishaia istoriia,* 387.

and pronouncements of Tajikistan's statehood themselves should also be attributed to the territory's isolation and material property. Though exact dates, concepts, and chains of events can be elusive in the historical record of early Tajikistan, primary and secondary sources do generally agree that the conditions of its territory delayed the expected official initiation of state building from the beginning of 1925 to the very end of 1926. In November and December of 1924, after the TsIK USSR's late October approval of the delimitation of Central Asia, officials in Tashkent went to work setting up the government of the Tajik ASSR. The first agencies of government were "organized" in the first half of December, in Uzbekistan.[41] These activities were guided in part by representatives from the Office of the Secretariat of the Central Committee of the Russian Communist Party. As they explained in a later report, "the Tajik Party's Organizational Bureau's [Orgbiuro] work began only in the month of February because of the fact that workers and the whole apparat of the TASSR Orgbiuro *and government* spent the entire month of January traveling from Tashkent to Dushanbe."[42]

The problem was that getting into Tajikistan from just beyond its borders was difficult even for individuals after NTD. While most sources about the earliest period of Tajikistan contain information about problems of transportation, few make detailed connections between mobility and state building. The closest mechanized transport to the southern regions was the railroad station in northern city of Guzar, beyond the Fan Mountains, and the shipping dock in Termez.

> It is about 200 versts from Guzar to the closest centers of Tajikistan (Sary-Assiia), [first] by a very difficult wheel capable road, and later on by pack animal transport. An automobile capable road from the river dock in Termez to Kabadian is somewhat shorter,

[41] Masov, ed., *Noveishaia istoriia,* 373-77.

[42] Italics inserted. RGASPI, f. 17, op. 33, d. 444, l. 47.

> but it has not been developed, and the crossing at the Surkhan and Kofarnihon rivers make the journey even less comfortable for the moving of goods than [the other route].[43]

With respect to external as well as internal travel of Tajikistan, pack animal transport continued to have "decisive significance."[44] The combination of transport methods used in Tajikistan—dirt roads, paths, "which are for the most part not even suited to horse passage due to climactic conditions," and rivers in need of engineering—and the related degree of its needs for economic growth, made transportation and commodities there extremely expensive, and distinguished it from the other Central Asian republics.[45] Government personnel mostly traveled by animal or foot on the dirt road from Guzar, while some others came by airplane from the city of Kagan, east of Bukhara city in Uzbekistan.[46]

Sources disagree on the timing of the arrival of government personnel because of different understandings of who and what comprised the government or key cadres. Some claim that it arrived in January, and others at other times. To A. Ianishevskii, a contemporary, the core group of cadres arrived in Tajikistan between February and March. Converging in Dushanbe, he explained, they also required time to "become acquainted with local conditions."[47] Among that first group of arriving representatives of the new state was B.V. Tolpygo, the Executive Secretary of the Uzbekistan SSR Orgbiuro in the Tajik ASSR, the organization responsible for

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[43] Poslavskii, "Ekonomicheskii ocherk Tadzhikistana," 229. Sary-Assiia was—along with Shohmonsur and Dushanbe—one of three pre-Soviet villages that later formed the capital of the republic. See D. P. Pulatov, "Dushanbe: Stolitsa Tadzhikistana," in *Tadzhikskaia sovetskaia sotsialisticheskaia respublika*, ed. M. Asimov (Dushanbe: Glavnaia nauchnaia redaktsiia Tadzhikskoi sovetskoi entsiklopedii, 1984), 8.

[44] Poslavskii, "Ekonomicheskii ocherk Tadzhikistana," 229.

[45] "Transport and Connection," TsGART, f. 19, op. 1, d. 539: ll. 28, 41 (full document is ll. 28-41); TsGART, f. 19, op. 1, d. 504: ll. 61-69a; "Importation Plan for the 1925-1926 Fiscal Year," f. 19, op. 1, d. 504, ll. 70a-74a (full document); and Poslavskii, "Ekonomicheskii ocherk Tadzhikistana," 229.

[46] Masov, *Noveishaia istoriia,* 377.

[47] Ianishevskii, "Sovetskoe stroitel'stvo," 201. A more recent source states that the government of the TASSR both traveled and arrived in Dushanbe in February 1925. See Masov, ed., *Noveishaia istoriia,* 418.

"economic and cultural development, [and] the process of sovietization of the republic."[48] In the summer of 1925, after his journey to his new home, and experiencing the territory's isolation from its Soviet neighbors, he explained to Joseph Stalin that "building the Party organization in Tajikistan is an undertaking of especially difficult conditions, far more difficult than in any other place in the Soviet Union."[49]

Tajikistan's physical isolation and extreme material needs manifested in the continuing belief among republic officials that their efforts were neglected by other regions and central authorities. As late as 1927, even judicial officials openly complained about the minimal human, material, and financial resources at their disposal. They blamed Moscow administrators, and claimed this was a primary reason why they had problems establishing legal apparatus.[50] At the same time, isolation also conveyed a sense for why Tajikistan seemed to be a lesser priority for upper-level Soviet authorities. "The scale of work in our republic is lower than the scale of work in some *guberniia* [in other regions of the USSR] and the only difference is that our republic is a vast territory and lacks ways of communication."[51] Drawing attention to the fragility of the state, one party stated that "we agree with you that such a Procurator's office structure as exists in Tajikistan exists nowhere else. We are, however, unable to do much, for, as you are no doubt aware, the Republic of Tajikistan does not have a cent of its own income, and lives at the expense of other republics."[52] Their letter highlighted the new republic's dependency, using

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[48] Masov, ed., *Noveishaia istoriia,* 396-97.

[49] Message addressed to Comrade Stalin, signed by Tolpygo (Executive Secretary of the Organizational Bureau of the Communist Party of Tajikistan) and D'iakov (Director of the Organizational Bureau of the Communist Party of Tajikistan), n.d., RGASPI, f. 17, op. 33, d. 444 (January-July 1925), l. 65 (full document is ll. 65-67); and Masov, ed., *Noveishaia istoriia,* 375, 402.

[50] Message addressed to Comrade Rabal'chenko, signed by Neganov, 13 May 1927, TsGART, f. 17 (Council of People's Commissars of the Tajik ASSR, 1926-1929), op. 3, d. 14, l. 17a (full document is ll. 17a-b).

[51] TsGART, f. 17, op. 3, d. 14, l. 17a.

[52] TsGART, f. 17, op. 3, d. 14, l. 17a.

comparison to explain why its sender believed that projects of other regions of the USSR logically took priority.

> [At a time] when the Central Government sets to the task of industrialization or electrification of the country [of the Soviet Union], when the Government everywhere presses an economic regime, and when our republic is entirely sustained by the expenditures of other republics, and your *viloyat* is worth less than the *uezd* of any *guberniia* on account of the size of its population and the scale of its work, it is clear that the Central Government cannot agree to increase material support and increase your personnel.[53]

This assessment of the economic and material reality of the Soviet state in Tajikistan during its earliest years is a less culturally biased evaluation than was often promoted by the cadres initiating programs for wholesale social, political, and economic change in the Tajik ASSR. Unfortunately, historians have been more interested in this more typical form of commentary about Tajikistan. They have too often been willing to reproduce, or too intent on criticizing, characterizations of the republic's early conditions using opaque judgments expressed in comments about "exceptional economic and cultural backwardness."[54]

The Railroad Solution

Contemporaries and historians alike have had no illusions about the comparative disadvantage of Tajikistan with respect to the wider USSR. The Termez-Dushanbe railroad was conceived as a project to overcome those trying conditions and to enable economic ambitions. In this section, I analyze how this project fit into broader planning and construction projects for railroads in Central Asia, and the extent to which it was prioritized within a larger program for connecting

[53] TsGART, f 17, op. 3, d. 14, l. 17a.

[54] See, for example, Rakowska-Harmstone, *Russia and Nationalism*, 32.

western and eastern parts of the USSR. The Termez-Dushanbe Railroad was only a tiny part of that larger endeavor, which Minister of Ways of Communication, I. N. Borisov put in perspective at the First Special Interagency Meeting. "'It should not be forgotten that the six thousand *versts* of daily construction envisioned by the meeting is but a drop in the ocean, the minimum necessary to satisfy the basic needs of cultural life in our country."[55]

The Termez-Dushanbe Railroad first entered policy and planning as an economic priority during the 1923-24 operating year in discussions between NKPS and STO. It was still at a design phase when it came up again at the Second Congress of the Communist Party (b) of Uzbekistan in November 1925, where the assembled officials set a tentative completion deadline of the fall of 1927.[56] In various aspects of institution building, commentators viewed the railroad as critical to economy and state, and thereby the overall well-being of the republic. For the authors of a 1926 report on economic growth prospects, the overall feebleness of the state in Tajikistan stood apart from the territory's political status, as reflected in the following assessment.

> At the moment of formation as a state [svoego *Gosudarstvennogo obrazovaniia*], Tajikistan, due to its geographic position—politics of the Amirate, several years of Basmachism—inherited weak finances and a fundamentally ruined economy, the recovery of which can progress normally only when the TASSR receives, on the one hand, the ability to connect itself with the general network of roads in Central Asia and the Union and, on the other, [sic] to establish economic ties among its own regions, thereby eliminating its current isolation from the broader Union economy.[57]

Such arguments about the purposefulness of the railroad, set squarely as they were in the context of economy of the republic and wider Central Asia, provided a good measure of the current condition and status of Tajikistan and regional territories as Soviet spaces, the physical legacies

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[55] RGAE, f. 4372, op. 15, d. 902, ll. 76b-a, 73a.

[56] Nazrulloev, *Dorozhnoe stroitel'stvo*, 43; Masov, *Noveishaia istoriia,* 418.

[57] Capitalization of "gosudarstvennogo" in original. TsGART, f .19, op. 1, d. 539, l. 28.

of the pre-Soviet period, and of what opportunities were on the horizon. They also indicated that the circumstances of potential railroad projects for Tajikistan, however, were not so different from those of its economy, being dependent on outside generosity.[58]

Tajikistan's mobility challenges, however, were part of a general Central Asian transport crisis.[59] Many railways of the tsarist era were still unrepaired or non-functioning, and those that could be employed were far over-taxed in service of state building efforts across sectors in Central Asia. A 1926 report on the topic, titled "Transport and Connection," explained that freight turnover in Central Asia had come to exceed that of the pre-war period, though "the technical facilities that make up a [rail]road—such as the track, bridges, buildings, water supply, wagons, and locomotive parks, etc.—are significantly worse than in the pre-war period, and have been left behind the technical achievements of the past ten years."[60] This was similar to patterns throughout the USSR. In the 1920s, the state commitment to industrialization altered the usage of the railroads inherited from tsarist Russia. R. E. H. Mellor explains that, "in contrast to the pre-revolutionary pattern of short, light and infrequent trains serving a predominantly agricultural economy, heavier, faster trains with a greater service frequency were needed."[61] The first railroad in Central Asia, the Transcaspian Railroad built in 1879, served military purposes until it was turned over to the Ministry of Communication in 1899, when it was renamed the Central

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[58] V. A. Vasil'ev, "Section 4: Transportation and Prospects for its Development," in "Regarding the Impending Transportation Construction, Improvement and Use of Water Forces in Central Asia," first edition, 1926, RGAE, f. 4372, op. 15, d. 902, l. 76b (full document is ll. 76b-56b).

[59] SredazEkoso, *Osnovnye cherty khoziaistvennogo plana Srednei Azii na 1926/27-1930/31 gg.* (Tashkent: Ekonomsovet Srednei Azii, 1926), 6-7.

[60] "Transport and Connection," RGAE, f. 4372, op. 6, d. 402, ll. 273-272, 270-269 (full document is ll. 274-177). The full report was often used as reference in meetings of STO and the Gosplan Presidium for planning transport in the context of economic development in Central Asia. It should not be confused with another source by the same title cited earlier in this chapter. See TsGART, f. 19, op. 1, d. 539.

[61] R. E. H. Mellor, "The Soviet Concept of a Unified Transport System and the Contemporary Role of the Railways," in *Russian Transport: An Historical and Geographical Survey*, ed. Leslie Symons and Colin White (London: G. Bell and Sons, Ltd., 1975), 90.

Asia Railroad. Its economic usefulness had been observed early on, and then the growing rail network became as integral to the development and success of cotton agriculture. Socialist commentators would later argue that the networks developed had not served the state well because many of the branch lines were planned, built, and managed privately.[62] The poor condition of railroads in the early Soviet period, combined with low river shipping capacity—and a dearth of rivers in Central Asia—meant that transport throughout the region was inefficiently conducted using "dirt, caravan roads."[63]

Railways, in particular, were seen as the key form of transportation. Soviet planners had inherited from Russian imperial ones the view that economic growth and state building in general was best facilitated by railroad construction, and this form of mobility remained dominant in the USSR for decades after WWII. Emphasizing rail development in transportation also made sense because of significant expansion of networks prior to the Russian Revolution left a legacy of tracks on the land. Moreover, railroad construction was a unique economic endeavor in the 1920s and 1930s because it did not require the hiring of foreign experts.[64] These conditions led the Central Asian Economic Council (SredazEkoso) to make rail a construction priority of its 1926 five-year plan.[65]

> The [five-year] plan addresses questions about the development of transport of all kinds. For Central Asia, far from internal regions of the Union, where the existence within the republics of a series of regions that are isolated from one-another by sands, deserts, and mountains, the improvement of routes of transportation is a fundamental prerequisite for

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[62] D. Spring, "Railways and Economic Development in Turkestan before 1917," in Symons and White, 47-48.

[63] RGAE, f. 4372, op. 6, d. 402, l. 273-272.

[64] Holland Hunter, *Soviet Transportation Policy*, 42; Robert N. Taaffe, "Transportation and Regional Specialization: The Example of Soviet Central Asia," Annals of the Association of American Geographers, vol. 52, no. 1 (March, 1962), 80, 97; Matthew J. Payne, *Stalin's Railroad: Turksib and the Building of Socialism* (Pittsburgh: University of Pittsburgh Press, 2001), 39.

[65] SredazEkoso was a regional, inter-republican economic administration in Central Asia, established by the Central Committee of the All-Union Communist Party of the USSR in 1922. Adeeb Khalid, *Making Uzbekistan: Nation, Empire, and Revolution in the Early USSR* (Ithaca: Cornell University Press, 2015), 153.

> eliminating [dependence on] natural forms of economy and involving all regions in the broader economic life of the Union."[66]

Rail was the most expedient form of intensive mobility between Central Asia and the dominant Soviet region of western Russia.[67]

Although commentators had differing views about which railroads to prioritize for construction (new or renewed) in Central Asia, Tajikistan's need for a line was undeniable.[68] **"**Transport and Connection" included statistics that revealed Tajikistan's relative disadvantage in a Soviet Union that prized railroad use. One table profiling Central Asia showed that, of a total of 3587 kilometers of lines in the region, 1703 kilometers lay in Turkmenistan, 1789 kilometers in Uzbekistan, and 95 kilometers in Kirgizstan.[69] Tajik ASSR was implied as part of Uzbekistan and not mentioned at all, though it had the same territorial status as Kyrgyzstan at the time. The Kyrgyz ASSR capital of Frunze (previously Pishpek; now Bishkek) had been connected to regional rail networks in 1924.[70] The railroad conditions of Tajikistan come more clearly into comparative focus in the regional statistics shown in Table 1. Not surprisingly, SredazEkoso's five-year plan of 1926 identified the construction of the Termez-Dushanbe Railroad as the most important priority in Central Asian railroad construction, and scheduled it to start that year.[71]

"Transport and Connections" version of the railroad plan approximated the final route of Tajikistan's railroad, though the route itself had been a matter of controversy up to when plans

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[66] SredazEkoso, *Osnovnye cherty*, 6-7.

[67] SredazEkoso, *Osnovnye cherty,* 14-15.

[68] Vasil'ev, for example, lists eight priority lines that do not directly relate to Tajikistan. He prioritizes for construction in Uzbekistan the line from Karshi to Termez, with a branch "of the lightweight type" to the Tajik capital of Dushanbe. See RGAE, f. 4372, op. 15, d. 902, l. 57a. See also, for example, RGAE, f. 4372, op. 6, d. 402, ll. 274-177; and Rakitin, "Respubliki i Oblasti Srednei Azii," 106-16.

[69] RGAE, f. 4372, op. 6, d. 402, l. 272.

[70] Taaffe, "Transportation," 85.

[71] SredazEkoso, *Osnovnye cherty*, 14-15, 108.

Table 1. Kilometers of railroad per territory and capita in Central Asian and other Soviet regions (1926)[72]

Name of republic or autonomous Oblast	Kilometers of railroad per 1,000 sqare kilometers	Kilometers of railroad per 10,000 of the population
Uzbekistan	10.5	4.1
Turkmenistan	4.1	17.6
Kyrgyzstan	0.5	1.1
Tajikistan	0	0
Total for Central Asia	3.9	5.2
Ukraine	30.5	n/a
Byelorussia	13.2	n/a
Central Black Earth Regions	25.5	n/a
Northern Regions	4.4	n/a
Moscow	44.1	n/a
Total for USSR	3.5	n/a

were approved in 1926. Some officials even debated the plan to have the line go to Dushanbe out of a belief that a different, more southerly destination would better serve economic ambitions.[73] The dominant plan which prevailed offered limited information on anticipated distances and costs of the line, and large sections. In all, it would be 256 kilometers-long and cost about 26 million rubles to build in three years, according to the following schedule: in 1926-27, the first leg of 150 kilometers from Termez to Regar was to be built at a cost of 12 million rubles; in

[72] RGAE, f. 4372, op. 6, d. 402, l. 271.

[73] See "Comparative Value of the Termez-Dushanbe and Termez-Sarai Routes," copy of a copy, attributed to Matushkin, 25 February 1927, TsGART, f. 17, op. 3, d. 14, ll. 7ab-8ab (full document).

1927-28, leg of 70 kilometers from Regar to Dushanbe at a cost of 10 million rubles; and then in 1928-29, a leg of 36 kilometers from Dushanbe to Kofarnihon (Kafirnigan) would be built at a cost of 4 million rubles."[74] These schedules and estimations were subject to ongoing negotitations of various kinds—as I discuss in the next section—that had material and temporal significance for the republic.

The Narrative of State Building: Construction Negotiations

The disadvantageous material conditions of Tajikistan by comparison with other regions of Central Asia and the USSR were easy to demonstrate in the fields of economy and transportation; it became part of often repeated arguments made in support of ongoing construction of the Termez-Dushanbe Railroad.[75] The nature of these conversations was important because it outlined stakes associated with providing this route to the republic, and with the desired relationships it should create for the USSR. So long as the railroad was incomplete, however, these definitions remained suppositional. This contingency also extended to the existence of Soviet Tajikistan. Such a spatial context, as Torsten Hagerstrand explains, is "undetermined until a project defines it." Discussions about the progressing construction of the Termez-Dushanbe Railroad reveal agents involved in the material foundation of the economy in Tajikistan. In this section, I analyze their infrastructure building events from the perspective of

[74] RGAE, f. 4372, op. 6, d. 402, l. 264. Kofarnihon is presently called Vahdat.

[75] On shortages and unequal distribution across regions and sectors, see Hunter, "Soviet Locational Objectives and Problems," chapter 2 in *Soviet Transportation Policy*.

the *project*, and I identify diverse phenomena dynamically involved in the making of Soviet "thereness" (to use Hagerstrand's term) in the new republic.[76]

The continuing bureaucratic uncertainties and debates that I examine corresponded to ebbs and flows in the railroad's construction, revealing influential factors, actors, and problems for consideration as part of the narrative of Tajikistan's history. I do so out of agreement with Abbott's claim that "a serious narrative program must address the problem of periodization, the problem of deciding whether the beginnings of social sequences inhere in the social process itself or are simply an arbitrary aspect of the way we talk about that process."[77] The palpable nature of the day-to-day activities involved in construction of the Termez-Dushanbe Railroad provides progression timelines for a clearer history of nationalities and NTD in Central Asia. Institutional conversations about the railroad were always about the degree of its material existence, and often about its relationship to capital for construction or the physical possibilities that it did and would offer to mobility. Those tangible markers of completedness, regardless of specificity, are signposts for periodizing the establishment of the state in Tajikistan in terms of railroad construction.

Soviet officials' conversations repeated rationales about the Termez-Dushanbe Railroad's anticipated value to the republic and the USSR because it strengthened their appeals to other agencies. Various organizations based in Tajikistan, Central Asia, and Moscow were involved in managing the railway project, and needed to appeal to each other as well as to more central and upper-level agencies, for the confirmation, assurance, or continuation of various kinds of support. In the mid- and late-1920s, inter-organizational cooperation was a messy affair, where

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[76] Torsten Hagerstrand, "Diorama, Path and Project," in *Human Geography: An Essential Anthology*, ed. John Agnew, Alisdair Rogers, and David N. Livingstone (Oxford, UK: Blackwell Publishers, 1996), 653-54.

[77] Abbott, *Time Matters,* 291.

lines of hierarchy were vague and shifting, and where agencies and names frequently appeared, disappeared, and changed, perhaps especially in Central Asia. The logics of state building, however, had some consistency, and demanded specific types of considerations. "Transport and Connection," for example, commented on the Termez-Dushanbe Railroad project by pointing out that

> The meaning of this line for Central Asia is undisputed, since not one kilometer of railroad track has been built in the TASSR [Tajikistan] to date. One of the most remote parts of Central Asia, it will be joined to the Union by way of railroad connection and will acquire the ability to develop cotton production, animal husbandry, arable farming and the extraction of its mineral wealth.... As a pioneering line, [the] Termez-Dushanbe-Kofarnihon [line] will not be profitable [*rentabel'naia*] for the first period."[78]

The report did go on to posit, however, that local prices would decrease after the railroad connected regions previously deprived of ways of communication, and included them in commodity turnover of the USSR. The economic growth that it expected would occur in most regions of Tajikistan "without a railroad would be impossible."[79]

Hesitancy characterized this and other statements about the railroad and economy because, following NTD, there was no guarantee at all that a railroad to Tajikistan would be built. The officials affected most by this uncertainty were those working in and on behalf of the republic. From the perspective of these individuals, negotiations on realizing the Termez-Dushanbe Railroad were structured by a spatial and logistical pecking order of organizations that attended to infrastructure budgeting in Central Asia. At a regional level, these institutions included central republican organizations and SredazEkoso, while Union-level agencies that were most involved—through local as well as Moscow representatives—were NKPS and STO.

[78] RGAE, f. 4372, op. 6, d. 402, l. 264.

[79] RGAE, f. 4372, op. 6, d. 402, l. 264.

All of them participated by some degree in planning, funding, and managing work on the Termez-Dushanbe Railroad. Inevitably, a hierarchy existed whereby Moscow organizations, empowered with greater jurisdiction, funds, supplies, and technical expertise, had greater influence than Central Asian ones. Tajikistan interests, meanwhile, had the least clout, isolated as they were, politically from information and spatially from control of funds and materials. All of these things were transferred to the republic from other regions of the USSR.

This hierarchy also reflected realities of physical networks affecting the schedule of construction on the Termez-Dushanbe Railroad. The line could only be built after the completion of other routes farther away. Tracks to Termez—rebuilt from Bukhara, or newly extended from Samsonovo, the city on the border between central Turkmenistan and Uzbekistan—were still under construction after the NTD.[80] Tajikistan officials, conscious of logistical and Union-wide limitations on resources, saw Tajikistan's economic well-being as linked to reconstruction of railroads taking place throughout other parts of Central Asia. Those other lines to Termez, after all, would bring goods to within two hundred versts of Dushanbe, from where they could currently be moved by road or by river.[81]

Though understandable, this situation exacerbated uncertainty about the Termez-Dushanbe Railroad. Even after this project became a long-standing point of discussion on economy and the object of preliminary plans, its form and future were indeterminate. Tajikistan officials seeking assurance were expected to prevent possible delays or cancellations by

[80] Samsonovo is known today as Amyderya.

[81] Message addressed to STO USSR, copied to NKPS, copy attributed to Ter-Egiazar'ian (Chairman of SredazEkoso) and Solntsev (Executive Secretary), 20 July 1928, RGAE, f. 1884 (Ministry of Ways of Communication of the USSR), op. 31 (t. 1 (Special Division of the Secretariat of the People's Commissariat for Ways of Communication of the USSR, 1921-1933), d. 1199 (April 1928-August 1929), l. 23 (full document is ll. 23-16); and Rakitin, "Respubliki i Oblasti Srednei Azii," 3

continuously lobbying personnel and institutions across Central Asia and the USSR to ensure that tracks were laid to Dushanbe. In fact, these authorities received guidelines from other institutions on how to navigate contingencies in the planning, funding, and construction process. In the summer of 1925, for example, NKPS advised Tajikistan officials that the Termez-Dushanbe Railroad was only a "preliminary project" based on "reconnaissance surveys," and that it faced several practical problems already. Technical planning, firstly, needed more financing. The union-level agency explained that, though there was indeed funding available for it, the challenge was to obtain it through the proper channels.[82] Obtaining labor of all kinds, secondly, was a different kind of complicated challenge. While a provisional agreement with the Turkfront—as the Red Army offensive in Central Asia was called—allocated soldiers to roadwork, neither this military organization nor roads administrations had obtained approval for the levels of credit needed to pay wages and other support. NKPS offered several possible solutions, including the recommendation that Tajikistan support its department, the Central Asia Region Department of Local Transportation (SAZOMES), in formally requesting that "the Center" give the planned line to Dushanbe status of "government road" (*gosudarstvennaia doroga*) since it that would come with guaranteed funding.[83] NKPS officials also informed their Tajikistan-based interlocutors that work on the railroad would likely be further stalled due to delays on other lines connecting to Termez. The union-level agency suggested that appealing to

[82] Report titled "Information in Response to the Tajikistan Autonomous Republic's Representation in Central Asia's Inquiry about the Short-term Plan for Work in Transport," no. 1312, copy attributed to Nikolaev (Acting Director of the People's Commissariat of Ways of Communication in Central Asia), certified by Perskii (Secretary of the Tajik ASSR's Representation in Central Asia), 15 August 1925, in Tashkent, TsGART, f. 19, op. 1, d. 512, l. 4 (full document is ll. 3-8); and Message addressed to the SNK Tajik SSR, no. 2352, copy attributed to Director of the Central Asia Regional Office of Local Transportation of the People's Commissariat of Ways of Communication (NKPS) of the USSR, 25 June 1925, in Tashkent, and received in August 1925 (possible mistakes in the dating), TsGART, f. 19, op. 1, d. 512, l. 17b (full document is ll. 17ab).

[83] TsGART, f. 19, op. 1, d. 512, l. 17a.

the governments of Uzbekistan and Turkmenistan might motivate faster construction of railroads farther away.[84] Allegedly, management disputes between these two republics, especially related to the sharing of costs for construction, was the primary cause of current delays. NKPS estimated that, even if the pace improved, the construction of the 217 kilometer line from Samsonovo to Termez, begun in April, could only be done by November 1925.[85]

Tajikistan's officials' efforts to influence funding and progress of the construction of the Termez-Dushanbe Railroad was hampered by material obstacles to information. They frequently lacked the knowledge need to manage day-to-day operations because of the very isolation that the railway project was meant to help overcome—exacerbating the sense of a spatial hierarchy in economic decision-making. Intense lobbying and negotiation had continued after SredazEkoso, in 1926, unambiguously prioritized completing the endeavor. It turned out that the planning and initiation of the construction project was still in no sense a guarantee that it would be done. Even after the first 30 kilometers of the railroad were finally constructed in January 1927, uncertainty persisted in related state correspondence.[86] The global constellation of problems—competing institutional and regional interests, material and financial shortages, as well as environmental factors that heightened the sense of remoteness—that threatened economic endeavors in Tajikistan were made more acute by a scarcity of information. In May 1927, following the spring period of bad weather, republican officials were keen to ensure that work on the next section of the line from Dzhar-Kurgan to Denau would continue without delay.[87] They expressed their

[84] TsGART, f. 19, op. 1, d. 512, l. 3.

[85] TsGART, f. 19, op. 1, d. 512, l. 3.

[86] RGAE, f. 1884, op. 31 (t. 1), d. 1199, l. 22.

[87] Message addressed to the Permanent Representation of the Tajik ASSR to the Central Asian Economic Council, attributed to Mukhitdinov (Chairman of the SNK of the Tajik SSR), Strel'nikov (Acting Chairman of Gosplan [Tajik ASSR]) and Zavel'skii (Secretary of Gosplan [Tajik ASSR]), no. 2490, 24 May 1927 (with a note indicating it was

frustration with isolation by complaining about their inability to greatly influence progress on the line. In a message to the Permanent Representation of Tajikistan to SredazEkoso, these SNK and Gosplan authorities explained that a key problem was that they did not receive updates with any regularity. "Given the absence of communication about the Central Asian Railroad's stock, about the release of funds, and about the *commencement* of work, we ask to be informed about these matters, and at the same time that measures be taken to start work as soon as possible so that the line to Denau will be completed by the end of the construction season."[88] Tajikistan officials' supplications were accompanied by an attempt to show that they too were willing to sacrifice for the project, and requesting that it be known that they were committed to contributing some of their government's own meager funds to the infrastructure project once it reached inside their republic's borders.[89] Their concerns and sense of isolation could not have been allayed by their representative's delayed response of two months later. It stated only that his office had passed on the requests for information and diligent construction progress, and that he was himself waiting for a response.[90]

Such logistical and spatial challenges to the Termez-Dushanbe Railroad project appeared to confirm the NKPS claim that the causes of Tajikistan officials' many problems lay in Central Asia. I will show, however, that this union-level transportation organization created many of the difficulties that regional projects faced. The reason for this was that the resource at the center of

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received 28 June 1927 (no. 2027), TsGART, f. 19, op. 1, d. 541, ll. 22a-b (full document). Dzhar-Kurgan and Denau are presently referred to as Jarqorghon and Denov, respectively.

[88] Italics inserted. TsGART, f. 19, op. 1, d. 541, l. 22b.

[89] Notably, the 100,000 rubles that they specified were still far short of the 250,000 to be provided by the Uz SSR. TsGART, f. 19, op. 1, d. 541, l. 22a.

[90] Message from the Permanent Representation of the Tajik ASSR to the Central Asian Economic Council in Tashkent to Gosplan of the Tajik ASSR in Dushanbe, no. 2877, signed by Gofman (Deputy of the Representative of the Tajik ASSR in Central Asia) and Burshtin (Clerk), 10 July 1927, TsGART, f. 19, op. 1, d. 541, l. 21 (full document). As Gofman notes, he had only received their message on 28 June 1927.

most discussions of infrastructure was money, and NKPS was the ultimate manager and distributor of funds in the 1920s. As I already showed, correspondence pertaining to the Termez-Dushanbe Railroad was replete with anxieties over the availability and granting of funds for the purchase of materials and labor. NKPS' decision not to guarantee financial support in some cases directly contributed to delays in realizing the railroad, economy, and statehood of Tajikistan.

NKPS withheld funds and interfered in many stages of the construction process despite the fact that trans-republican and interdepartmental relations that governed and determined support for work on the line were based in central planning, budgeting, and law. One funding controversy in the fall of 1927 showed that problems sometimes stemmed from the fact that the Soviet budgeting process was not capable of contending with the unanticipated expenditures posed by the Termez-Dushanbe Railroad project. An engineer's report from August explained that construction would be stopped if an additional 200,000 rubles were not be sent to his work crew by 1 September. The Senior Inspector, Dubrovin, had conducted a revisionary survey inspired by concerns shared amongst his co-workers. His findings demonstrated that the state was especially underprepared for environmental management in this part of the USSR. He explained that many of the higher costs were due to the fact that the terrain became increasingly challenging to work on as the structure neared Tajikistan. Dubrovin warned that, should they not receive the requested funds, the project would face severe consequences.

> We will be forced to disband the construction organization and staff, which will immediately damage our project and furthermore have an effect on subsequent construction. It would be much easier to go on without interruption, since the construction season [in southern Uzbekistan] closes for only two winter months,

> [causing less inconvenience] than having to once again organize the construction organization, [and thereby] raising the cost of the project with such overhead costs.[91]

An accompanying note also pointed out that other laborers were currently en route to his work site in the Surkhan River region, and could lose their planned employment before they even arrived.[92] The issues that he raised led to a debate between NKPS and Central Asian organizations over which institution should be responsible for this new expenditure.

There was no set procedure for finding or allotting extra funding in such an improvisational manner. The state still under construction lacked many rules, and the lack of clear procedures often interfered with the common cause. Tajikistan officials lobbied those of the Uzbek SSR for these funds. Following confused lines of authority and communication, their representatives to SredazEkoso and to the Central Committee of the Uzbek SSR asked whether funds would be forthcoming before Dubrovin's deadline of 1 September. Out of desperation, they asked about the truthfulness of a rumor that Faizulla Khojaev, the head of the Uzbekistan, had made a verbal promise of 50,000-80,000 rubles to Comrade Ratkai, the Deputy Head of NKPS in Moscow.[93] The deadline passed, and as the work stoppage continued into the end of the fall Uzbekistan officials also made genuine efforts to find the funds, though in ways that their counterparts in Tajikistan might not have agreed to. In November, the Uz SSR representative in

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[91] "Report on the Construction of the Termez-Dushanbe Railroad (Dzhar-Kurgan-Surkhan-Kuterma leg)," attributed to Dubrovin (Engineer, and Senior Inspector of the Representation of NKPS in Central Asia), and certified by Burshtin (Clerk), n.d., TsGART, f. 19, op. 1, d. 541, l. 11 (full document is ll. 7-12).

[92] Cover letter for the "Report on the Construction of the Termez-Dushanbe Railroad (Dzhar-Kurgan-Surkhan-Kuterma leg)," from the Representative of the NKPS in Central Asia to the Permanent Representative of the Tajik ASSR, no. 1412 (copy no. 3341), certified by Burshtin (Clerk), 20 August 1927, TsGART, f. 19, op. 1, d. 541, l. 6 (full document).

[93] Message in response to the Representation of the People's Commissariat of Trade in Central Asia's 21 August communication (no. 1428) regarding the construction of the Termez-Dushanbe Railroad," addressed to the Permanent Representation of the Tajik ASSR to the Central Committee of the Uz SSR in Samarkand, copy no. 3358, attributed to Gofman (Deputy Representative of the Tajik ASSR to SredazEkoso) and Tolstiakov (Secretary), n.d. (1927), TsGART, f. 19, op. 1, d. 541, l. 13 (full document).

Moscow proposed that money be funneled to the railroad from agricultural development programs in the autonomous republic. He reasoned that cotton agriculture in southern regions of Tajikistan "would not be expedient or profitable due to transportation conditions and because the line has not yet been built" far enough.[94] No measure of offered sacrifices like this, nor lobbying, maneuvering, and rumors could find the money needed before the winter. A key reason for this was that NKPS was ultimately in control of disbursements of funds in railroad construction, and it did not consider Uzbekistan and Tajikistan worthy of the help they were requesting.

Between the fall of 1927 and early 1928, NKPS way open about the fact that it was withholding funds and slowing construction for at least half a year on the basis of some budget-related bitterness.[95] The rapidity of political, institutional, and material change throughout the region had resulted in disputes over the governance of economy, even as laws on the scale of the USSR were still being formed. NKPS claimed that the Uzbek government owed 271,000 rubles worth of work, overdue from prior work completed on the Samsonovo-Termez line. The sum, it explained, was a debt transferred from the BNSR to the Uzbek SSR after the NTD of 1924, and then carried forward into the budget of the 1926-1927 budget year. NKPS alleged that Bukhara had only spent two-thirds of the 934,000 rubles received for construction of the Samsonovo-Termez line in 1924, and that the remaining money was still in play as an Uzbek transportation resource. "So it has been brought forward to the current year, and is the reason that NKPS is

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[94] Message in response to "message no. 1565 on the question about the allotment of materials for continuation of construction of the Termez-Dushanbe Railway line" from the Permanent Representation of the Uzbek SSR to the Government of the USSR to the SNK of the Uzbek SSR (in Samarkand) and the SNK of the Tajik ASSR (in Dushanbe, "by air"), no. 5289, attributed to Rozental' (Permanent Representative of the Uzbek SSR [to the Government of the USSR] and Tanal'skii (Executive Secretary), 24 November 1927, TsGART, f. 19, op. 1, d. 541, l. 52b (full document is ll. 52a-b).

[95] Message addressed to the Permanent Representative of the Tajik ASSR to the Central Asian Economic Council (copied to Gosplan Uz SSR in Samarkand, and the Management of the Central Asian Railway in Ashkhabad), no. 3250, attributed to Ratkai (Deputy Representative of NKPS in Central Asia, based in Tashkent), and certified by Burshtin (Clerk), 21 August 1927, TsGART, f. 19, op. 1, d. 541, ll. 14-15 (full document).

providing 729,000 and not the requested 1 million."[96] In fact, SredazEkoso accused NKPS of withholding more than one third of 2.5 million rubles originally expected for the 1927-28 operating year for construction of the Termez-Dushanbe Railroad. "After four years of sincere requests," it explained, only 50 kilometers would be completed—and at the most austere standard of construction.[97] More importantly, the dispute over the alleged debt showed that the nature of Soviet budgeting was without clear or enforceable norms in Central Asia. The region's Economic Council appealed to other All-Union organizations in Moscow—STO and Gosplan—to fix the lack of "realistic budgeting" exhibited by NKPS. It claimed that resources assigned to Central Asia "do not satisfy even the most basic needs for the strengthening of transport in Central Asia and radically diminish all projects."[98]

Central Asian institutional appeals won support of union-level institutions by maintaining focus on material and spatial significance of the funds debated, while accusing NKPS of illegally penalizing them. The Permanent Representation of the Uzbek SSR to the Government of the USSR drew attention to the material significance of the sum by explaining that Tajikistan was a place where every single kilometer of track was critical to the cotton economy, and that "experience shows" that 271, 000 rubles could add from twelve to fifteen kilometers of track.[99]

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[96] "NKPS Statement in Response to the Request of the Permanent Representative of the Uzbek SSR on the Allotment for the Construction of the Termez-Dushanbe Railroad," addressed to the SNK of the USSR, copy no. 3a-72, attributed to the NKPS Central Department for Railroad Construction in Moscow, signed by Borisov (People's Commissar of Ways of Communication) and Lazarevskii (Director of the Central Department for Railroad Construction), 30 April 1928, RGAE, f. 1884, op. 80, d. 345, ll. 232b-231a (full document).

[97] See Message addressed to the Council of Labor and Defense (copied to Gosplan USSR), no. 3a-41, attributed to the NKPS in Moscow, signed by Sh. Borisov (People's Commissar of Ways of Communication) and Lazarevskii (Director of the Central Department of Railroad Construction), 3 March 1928, RGAE, f. 1884, op. 31 (t. 1), d. 1204, l. 2a (full document is ll. 2a-3b). Notably, they referred to the history of requests for investment. The actual amount allotted fo the 1927-28 year was 1 million.

[98] Message addressed to the Council of Labor and Defense of the USSR in Moscow (copied to Gosplan and NKPS of the USSR), no. 2060, attributed to Ter-Egiazar'ian (Chairman of the SredazEkoso), and certified by Solntsev (Executive Secretary), 19 February 1928, RGAE, f. 1884, op. 31, t. 1, d. 1204, ll. 5a-b (full document is ll. 5a-6b).

[99] Message "Regarding the Question of Obligating NKPS of the USSR to Release the Full 1 Million Rubles Assigned by its Budget of 1927-1928 to the Construction of the Termez-Dushanbe Railroad," addressed to the SNK

In his view, the sum and the budget became a legal obligation when the SNK of the USSR approved it, followed by its confirmation by the Central Committee of the USSR.[100] Higher organs evidently agreed. They favored the Central Asian case's appeal to a particular understanding of hierarchy in the USSR. As late as May 1928, the National Commissariat of Finance of the USSR argued that the NKPS action in "migration of credits from item to item [of budgets]" was illegal and violated a number of regulations. Above all, the credits in question belonged to a project and budget that had been closed two years earlier, and thereby were no longer relevant to current budgets. "Therefore, it is hard to understand what is the goal and according to what procedure the NKPS believes it is justified in requesting reimbursement of the named sum."[101] Their inability to silence the transport agency, however, reflected continuing lack of clarity over lines of authority in the USSR. NKPS answered these accusations by asking STO to ignore them.[102] NKPS saw itself as empowered to work autonomously in transportation work mandated by "Higher Organs." Citing sections of the Budgetary Law of the USSR, it argued that "in order to do this, NKPS is vested with the right to independently maneuver

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of the USSR (copied to NKPS USSR, the People's Commissariat of Finance of the USSR, and the Workers' and Peasants' Inspectorate of the USSR), signed by Islamov (Permanent Representative of the Uzbek SSR to the USSR) and Tanal'skii (Secretary of the Permanent Representation of the Uzbek SSR to the USSR), 21 April 1928, RGAE, f. 1884, op. 31 (t. 1), d. 1199, l. 3a (full document is ll. 3b-2a).

[100] They viewed NKPS's justification for withholding 271,000 rubles to be "unlawful" for several reasons. First, nothing in the budgetary materials for the current year of railroad construction, nor did those of the TsIK USSR suggest of any consequential relationship to the Samsonovo-Termez line, which was already in use. Second, these materials did not mention the 271,000 rubles allegedly owed. Third, it noted that this information was also missing from from 1925 budgetary materials of both NKPS and STO for the 1926-1927 fiscal year. See RGAE, f. 1884, op. 31, t. 1, d. 1199, ll. 3b-2b.

[101] "Regarding the Transfer of Credits from the NKPS Budget to the Construction of New Railroads," addressed to the Council of Labor and Defense (copied to NKPS), no. BV-381, attributed to Kuznetsov (Deputy Director of the People's Commissariat of Finance of the USSR) and Pal'chikovskii (also of NKF USSR), n.d. (7 May 1928 according to RGAE, f. 1884, op. 31, t. 1, d. 1199, ll. 13b-12a), RGAE, f. 1884, op. 31, t. 1, d. 1199, l. 15b (full document is ll. 15b-a).

[102] "NKPS Statement in Response to the Request of the NKF USSR of 7 May 1928, no. BV-381 on Denying the People's Commissariat of Ways of Communication the Right to Transfer Credits from Item to Item," addressed to the STO of the USSR, signed by D. Sulimov (People's Commissar of Ways of Communication) and B-[illegible] (Director of the Central Department of Finance and Budgeting of NKPS), 16 May 1928, RGAE, f. 1884, op. 31 (t. 1), d. 1199, ll. 13b-12a (full document).

credits" to those projects it saw as most fit, and to "close the work and non-productivity of those who in the current year cannot complete construction in the approved term."[103]

The matter had devolved, in part, into a debate over legality and procedure, the outcome of which is not known to me. Central Asian lobbyists had succeeded in exposing the Soviet administration's potential for arbitrariness at the center of authority over a sum that, although being of immense significance to Tajikistan, was ultimately very minor on the scale of the USSR. Whatever its actual motives, NKPS used this imbalance of significance to intimidate Central Asian organizations several times over the course of 1928. In February, it justified its unwillingness to pay out the 271,000 by claiming a different understanding of the Termez-Dushanbe Railroad project. It claimed that NKPS had envisioned "the most minimal sort of construction, which would not guarantee uninterrupted movement, and subsequently requiring excessive, and fairly significant expenditures for reconstruction" over the next three years—on a timeline of completion far later than original plans.[104] The push and pull of negotiations between NKPS and Central Asian organizations frequently revolved around real-time assessments of projects in progress, or around the desire for better surveys and other preparatory exercises. In October 1928, NKPS gloomily predicted a delay in work completion because of the greater environmental challenges to work on the Tajikistan side of the railroad. "Given the work that will be required by the topography of the Denau-Dushanbe leg, including major earthwork operations and with a significant amount of bridge construction the line may not be completed, even to the most basic technical specifications, any earlier than the end of 1930."[105] The Central

[103] RGAE, f 1884, Op. 31, t. 1, d. 1199, l. 12b.

[104] RGAE, f 1884, op. 31, t. 1, d. 1204, l. 2a.

[105] Message titled "On the Completion of the Termez-Dushanbe Railway Line," addressed to STO (copied to the Permanent Representation of the Uzbek SSR to the Government of the USSR), signed by Iu. Rubyi (People's Commissar of Ways of Communication) and A-[illegible] (Director of the Central Department of Railroad

Asian organizations continued to counter such tactics by calling for faster tempos on the basis of familiar spatial arguments. In July of 1928, SredazEkoso even highlighted Tajikistan as a republic embodying problems usually affecting smaller scale spaces.

> The joining of new economic regions with economic life of the Union, and their transition to socialist forms of development, invariably depends on the problem of transport. This situation particularly concerns such regions as Tajikistan, where the lack of a basic form of transport—railroad and the corresponding waterways and carting roads—is the single cause of its economic and cultural backwardness, preventing the development of its rich productive capacities.[106]

Central Asian agencies called upon economic rationales for building the Termez-Dushanbe Railroad that were defined earlier in the 1920s and which they could now cite in government reports and various publications.[107] As the project progressed, however, these arguments highlighted real-time causal connections between the pace of railroad construction and that of economic growth in Tajikistan. At the end of the 1920s, such statements complained that what little cotton was being produced was very difficult to export by current available means of transportation.[108]

Nowhere was the relationship between material conditions and economic vitality converging on the Termez-Dushanbe Railroad under construction felt more strongly than on the line itself. The various laborers and managers of this project experienced delays of supply,

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Construction), n.d. (April 1928-August 1929), RGAE, f. 1884, op. 31, t. 1, d. 1199, l. 42a (full document is ll. 42b-a).

[106] RGAE, f. 1884, Op. 31, t. 1, d. 1199, l. 23.

[107] See, for example, RGAE, f. 1884, Op. 31, t. 1, d. 1199, l. 21.

[108] Message "regarding the release of 8 million rubles during the 1928-29 operating year for the completion of construction on the Temez-Dushanbe Railroad line," further to the plan of the People's Commissariat of Trade of the USSR, having no. 177 on 16 July, and the conclusions of the Permanent Representative of the Uzbek SSR , having no. 543-2 on 27 July, addressed to the Council of Labor and Defense (copied to NKPS USSR, NKFin USSR, NKTorg USSR, VSNkh USSR), signed by Islamov (Permanent Representative of the Uzbek SSR to the Government of the USSR) and Tanal'skii (Secretary of the Permanent Representation of the Uzbek SSR), 31 July 1928, RGAE, f. 1884, op. 31, t. 1, d. 1199, l. 37b (full document is ll. 38b-37b).

whether for work or sustenance, in a way that affected their ability to accomplish their daily tasks. To a certain extent, the debates of mid- and upper- authorities concerned with construction of the Termez-Dushanbe Railroad did not resonate with how they were understood by the people who worked on the ground. To Vargarshak Karamov, the Deputy Chief of the project, he and his colleagues on site were ill-treated by the variable and difficult environmental contexts that they had no choice but to endure, in addition to the unpredictability of supply. He had worked on the Central Asian railroads since 1925, starting in Samsonovo before his appointment to the Termez-Dushanbe line. In his recollections of the railroad to Tajikistan soon after completion, he attributed delays and slow progress to a lack of material support from upper-levels of organization; he was not concerned with what institutions were culpable.[109]

For Karamov, the Soviet economy arrived in Tajikistan with the train, on tracks that were a reliable, controllable, indisputable link to the rest of Soviet territory, and its material and other forms of support. This significance of the railroad to Tajikistan was palpable on the line as each leg was constructed. When, in late 1927, construction reached the Surkhan station near Denau, about sixty kilometers from Termez on the Uzbek side of the border, it populated the place with the materials for labor and with those which would go on to Tajikistan. Kamarov later recalled how supplies were brought closer and closer to Tajikistan with the progress of the line. "'Buses, carts, caravans of camels, and all that used to be based in Termez was relocated to the Surkhan warehouse point'" on the dirt road that had been built from Termez to Dushanbe ahead of the

[109] Report addressed to Comrades Guseinov (Central Committee of the Communist Party of Tajikistan), Zelenskii (Central Asia Bureau of the Central Committee of the All-Union Communist Party), Blagonravov (Deputy Peoples Commissar of Ways of Communication), and Mustu (Representative of NKPS [in Central Asia]), signed by Vagarshak Dzhavadovich Karamov (Director of the Termez-Stalinabad [Railroad] Project, Member of the Central Committee of the Communist Parties of Tajikistan and Uzbekistan, and the Representative of NKPS in Tajikistan), 30 May 1930, in Stalinabad, RGASPI, f. 62 (Central Asia Bureau of the Central Committee of the All-Union Communist Party, 1922-1934), op. 2 (Documents, 1922-1934), d. 2185, l. 46a (full document is ll. 45a-46a).

railway. "'And so, just like mushrooms, tents, bases, warehouses, sheds made of reeds, teahouses, and cafeterias, grew up all around the station.'"[110] His reminiscences corresponded to the imagined significance of the railroad implied by the discussions that had explicitly supported it for most of a decade. Kamarov himself drove the first train into Dushanbe two years later, at 15:00 o'clock on 1 September 1929, one hour after the railroad was completed.[111]

Conclusion

Just three months later, Tajikistan's status was upgraded from Autonomous Republic to an independent republic (SSR) of the USSR. The Termez-Dushanbe Railroad had been conceived as a project to overcome the isolation of Tajikistan and to enable Soviet ambitions in its economic growth by material connection facilitating mobility. The new republic had almost no legacy of the sort of life envisioned by Soviet planners, having no history of what they considered large- or even medium-scale trade or industry, nor any sophisticated political and administrative antecedents. The new republic also had few of the structures usually associated with supporting such sectors, including buildings and construction materials, machines, equipment, and roads. Instead, officials saw Tajikistan as characterized primarily by subsistence economies and small-scale, localized politics. They considered this a result of how insular its roadless territory was, with respect to the outside world as well as in the ways its regions internally related to one-another. This, in turn, was due to the fact that the land was a primarily mountainous terrain that was uniquely difficult to traverse and get to. The construction of the Termez-Dushanbe Railroad provided a physical connection that periodized the new republic's

[110] Nazrulloev, *Dorozhnoe stroitel'stvo*, 48-49.
[111] Nazrulloev, *Dorozhnoe stroitel'stvo*, 55.

real inclusion in the grand narrative of Soviet state building. The Tajik SSR was now a physical part of the USSR, unequivocally involved in the historical trajectory of its planned economic growth.

The correlations between the railroad and the space, history, and economy of the republic, made more often by contemporaries than by historians, indicates that considerable contingency characterized the physical connection of Tajikistan to Termez and the USSR. It is not enough to claim, as do Masov et al., that "the economic birth of the Tajik republic began somewhat later than in other regions of the country [USSR]."[112] The very establishment of the Soviet state came later, arriving on the train, which represented a reliable, controllable, indisputable link to the rest of Soviet territory, and all forms of support for state building that that represented. The completion of the Termez-Dushanbe Railroad constituted the palpable founding event of the republic of Tajikistan. Because the significance of the railway was agreed upon both prior to and following its construction, the debates and struggles ongoing as it was built together amount to conversations about the existence and value of the republic itself. It may have been a coincidence, but the railroad's arrival in September 1929—along with all that it meant materially—also anticipated the renaming of the capital city in the fall to "Stalinabad." The railroad name, however, continued to use the old title for the city for at least another year.

By connecting Tajikistan and facilitating its economy, the Termez-Dushanbe Railroad project delimited the republic's relationship to the Soviet state and to Soviet geography, as well as the manner and tempo with which this occurred. This was only a first step in Soviet efforts to overcome the legacy of Tajikistan's physical environment in order to support economic growth. Road building, as I discuss in Chapter 2, remained a priority of the state alongside establishing

[112] Masov, ed., *Noveishaia istoriia,* 418.

reliable commodity chains to exploit the new possibilities of mobility, which I analyze in Chapter 3.

CHAPTER 2

THE STALINABAD-QURGHONTEPPA ROAD PROJECT: LANDSCAPING THE SOVIET STATE IN TAJIKISTAN'S SOUTHERN REGIONS

> "Tajikistan is a country of solid mountains…. The mountainous character of the country determines the form of its ways of communication."[1]
>
> ———Saidov Nazrulloev, *Dorozhnoe stroitel'stvo*

The top-priority transportation project of the Tajik SSR was cancelled midway through the first five-year plan (1928-1932). This railroad was meant to connect the Termez-Dushanbe Railroad junction in the capital with Qurghonteppa, the administrative center of agricultural operations in the republic's southern foothills regions. The defunct project had been universally hailed as critical to the establishment and growth of an industrial-scale cotton sector out of a belief that such infrastructure would facilitate greater commodity exchange with other Soviet regions. The lack of a reliable connection to far-away transportation networks stilted immense efforts underway to create irrigation, planting, and processing facilities in southern Tajikistan. On 27 April 1930, however, the Council of Labor and Defense (STO) in Moscow initiated a series of resolutions cancelling the Stalinabad-Qurghonteppa Railroad endeavor. In its place, the People's Commissariat for Ways of Communication (NKPS) commissioned the construction of a highway capable of carrying horse-drawn carts and automotive vehicles, which was completed in 1933.

This chapter addresses the changing form of this route to analyze how the Soviet state created physical space for itself in southern Tajikistan. On the surface, this road project's story was already remarkable for several reasons. First, it was a rather short route of just over 100 kilometers, yet it took seven years to establish a connection of sufficient quality between the

[1] S. Nazrulloev, *Dorozhnoe stroitel'stvo i razvitie transporta v Tadzhikistane, 1917-1941 gg*. (Dushanbe: Izdatel'stvo "Donish," 1979), 8.

capital and Qurghonteppa.[2] Furthermore, Soviet planners seldom chose highways as primary transportation arteries. They had inherited from Russian imperial policy the view that economic growth and state building in general was best facilitated by railroads—the form of mobility that remained dominant across the USSR until the 1970s.[3] Opting for a highway was atypical, and indicated that unusually significant challenges of Tajikistan outweighed the benefits of doing the more complicated and time-consuming work involved in a railroad. Finally, the changing form of this project was also significant because organizations agreed that railroad construction here was too expensive.[4] Planners had decided that a highway could be constructed more cheaply and easily. The efficient completion of the transport artery would more rapidly facilitate the wider economy under development.[5]

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[2] Message addressed to the Representation of the Central Control Commission of the All-Union Communist Party and the RKI in Central Asia, attributed to the Central Control Commission of the All-Union Communist Party and the People's Commissariat of the Workers' and Peasants' Inspectorate of the USSR, signed by Sevriugin (Deputy Director of TsITIS) and Shippo (Senior Inspector), 19 May 1930, Russian State Archive of Social and Political History (*Rossiiskii gosudarstvennyi arkhiv sotsial'no-politicheskoi istorii*; hereafter RGASPI) f. 121 (Representative of the Central Control Commission of the All-Union Communist Party and the People's Commissariat of the Workers' and Peasants' Inspectorate in Central Asia, 1924-1925), op. 2 (Documents, 1925-1934), d. 235 (February 1930), l. 109 (full document); and Nazrulloev, *Dorozhnoe stroitel'stvo*, 71.

[3] Holland Hunter, *Soviet Transportation Policy* (Cambridge: Harvard University Press, 1957), 42; and Leslie Symons and Colin White, introduction in *Russian Transport: An Historical and Geographical Survey*, ed. Symons and White (London: G. Bell and Sons, Ltd., 1975), xx.

[4] See, for example, Message addressed to Anvarov (Permanent Representation of the Tajik SSR to the USSR in Moscow), attributed to Chernyi (Gosplan Tajik SSR), 22 April 1930, Central State Archive of the Republic of Tajikistan (*Tsentral'nyi gosudarstvennyi arkhiv respubliki Tadzhikistan*; hereafter TsGART), f. 18 (Council of People's Commissars of the Tajik SSR, 1929-1939), op. 1, d. 102, l. 201 (full document).

[5] "Report on the the fulfillment of Resolution no. 29 (18 July 1929) of the Central Committee of the All-Union Communist Party 'On the construction of the Stalinabad-Qurghonteppa Railroad'" (secret), addressed to the Central Asia Bureau of the Central Committee of the All-Union Communist Party, attributed to the Central Control Commission of the All-Union KP and the RKI of the USSR, n.d. (February 1930), RGASPI, f. 121, op. 2, d. 235, ll. 105, 103 (full document is ll. 107-103); and Internal report "on the issue of constructing the Iangi Bazar to Qurghonteppa Railroad," attributed to the RKI in Central Asia, n.d. (February 1930), RGASPI, f. 121, op. 2, d. 235, ll. 92-90 (full document); and Message addressed to Mikhail Andreevich, copy of a copy attributed to Khojibaev and Solntsev, 26 November 1928, TsGART, f. 17 (Council of People's Commissars of the Tajik ASSR, 1926-1929), op. 3, d. 78, l. 4a (full document is ll. 4a-b). Inverted pagination in archival citations reflects the original pagination in the files themselves.

In the case of the Stalinabad-Qurghonteppa road project, the language of administrative expediency obscured the real challenges responsible for the decision to abandon it in favor of a highway. As I showed in Chapter 1, mundane conversations about finances associated with transportation often reflected other dimensions of state building. Here, delays, wasted resources, and the perennial failure to complete the road(s) was the result of the Soviet state's inability to effectively manage the native physical environment. The fundamental problem was that this territory had simply never borne transportation infrastructure sufficient to accommodate the material culture of an industrial society—to say nothing of an aspiring Communist utopia.[6] I will argue that the cycles of starting and stopping in planning and progress on the Stalinabad-Qurghonteppa road project illuminate how Soviet officials negotiated the republic's terrain. The native physical environment was an under-anticipated challenge to plans for creating a material context suited to activities and goals of economic growth in Tajikistan. The republic's legacy, of a rugged territory combined with lesser ways of transportation, magnified the difficulty of tasks related to mobility in general, and to this route in particular.

The central challenge to officials involved in the Stalinabad-Qurghonteppa road project was their need for knowledge about southern regions of the republic. Politicians, planners, engineers, and others lacked the information required to confidently plot routes and construction in the form of roads that could be built over and otherwise exploited.[7] Officials' ignorance of the territory had ramifications beyond planning the route too. The mountainous terrain and climate

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[6] See Nazrulloev, *Dorozhnoe stroitel'stvo*, 5; Ia. T. Bronshtein, "Opyt likvidatsii bezdorosch'ia i sovremenaia strategiia razvitiia transporta Tadzhikistana," *Izvestiia AN Respubliki Tadzhikistan* 3, no. 7 (1987): 43–49; and R. M. Masov, ed., *Noveishaia istoriia (1917-1941)*, vol. 5 of *Istoriia Tadzhikskogo naroda* (Dushanbe: Institut Istorii, Arkheologii i Etnografii im. A Donisha AN Respubliki Tadzhikistan, 2004), 376, 420.

[7] Report titled "General assessment of the construction of railroads based on evaluation by the Representation of RKI in Central Asia that was conducted in February 1930," attributed to Stoianovich (Commission Chairman) and Bel'khov, Sabanin, Anfilov, and Remnev (members of the commission), and certified by the signature of Makarevskii, n.d. (February 1930), TsGART, f. 18, op. 1, d. 93, l. 167 (full document).

challenged work crews involved in surveying as well as construction. Under-anticipated weather and land formations caused a variety of delays in productivity, including by interfering in roadwork through seasonal variation in soil consistency, flooding and wash-outs, and other factors occurring by virtue of dynamics beyond human intention. Saidov Nazrulloev summarizes some of their effects with special emphasis on the loessial soils of Tajikistan. In the rainy periods of fall and winter, he explains, this dirt turned into "impassable mud," and in the summer formed a fine dust that in some places was a meter thick. "Add to this mountain rivers, and the need to clear roads of persistent avalanches and landslides, and one can understand the high cost of constructing and maintaining the roads."[8]

This situation did not, however, prevent Soviet officials from making large-scale plans. By the mid-1920s, they envisioned the Stalinabad-Qurghonteppa road as the priority artery of a constellation of routes comprising what soon came to be known as the Southern Circle (*Iuzhnoe Kol'tso*) of roads. Altogether about five hundred kilometers long, they would extend southwest past Qurghonteppa to border areas, then east and north, through Kulob and Iangi-Bazar, and back to the capital, reaching points in fertile river valleys of the Kofarnihon, Vakhsh, and Amu Darya.[9] As noted in Chapter 1, the facilitation of mobility was a state priority in East Bukhara and Tajikistan of the 1920s. Even though ground routes were generally managed for only basic functionality between important centers and for military passage, the transportation sector

[8] Nazrulloev, *Dorozhnoe stroitel'stvo*, 67.

[9] "Transport and Connection," Russian State Archive of the Economy (*Rossiiskii gosudarstvennyi arkhiv ekonomiki;* hereafter RGAE), f. 4372 (State Planning Committee of the USSR (Gosplan), op. 6 (Transport Section, 1921-1930), d. 402 (September 1926-January 1927), ll. 226-225 (full document is ll. 274-177); and Nazrulloev, *Dorozhnoe stroitel'stvo.* 68. For historical comparison with these early beginnings of the *iuzhnoe kol'tso*, see, for example, Ia. T. Bronshtein, "Sovremennoe sostoianie gruzovogo transporta Tadzhikskoi SSR i nekotorye perspektivy ego razvitiia," in *Voprosy ekonomiki transport: Sbornik trudov*, Trudy Tashkentskogo instituta inzhenerov zheleznodorozhnogo transporta no. 28, edited by M. N. Belen'kogo (Tashkent, 1963), 97. For a useful summary discussion of the main roads construction works in the 1920s and 1930s, see A. I. Ismoilov and A. V. Sutsepin, *Naqliyot va rohhoi kishvari kuhi* (Dushanbe: Nashriyoti "Irfon," 1974), 10-16.

received one of the largest portions of state funds devoted to the region.[10] During the first half of the decade, the EB TsIK devoted much of its small staff's energy to maintaining useable routes for mobility.[11] Their efforts included obligating Revolutionary Committees (*Revkoms*), native residents, and military staff to help repair or improve routes and bridges, as well as to shelter and supply traveling representatives of the state. The EB TsIK viewed the improvement of routes as having contributed greatly to successes of the Red Army against Basmachi guerrillas, as well as to the importation of all forms of supplies for building and sustenance.[12] The NTD injected new energy into planning and economic growth efforts on the territory of Tajikistan, although the state still faced significant challenges. The two railway stations closest to Dushanbe in the mid-1920s were located beyond waterways and mountains, at Guzar (in northern Tajikistan) and Termez (in southern Uzbekistan), over 100 and 200 kilometers away, respectively.[13] This situation made the completion of the Termez-Dushanbe Railroad an urgent necessity, and the recipient of the majority of state support for transportation related to Tajikistan.

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[10] "Preliminary considerations regarding road and bridge construction in the T[ajik] SSR [sic] in 1925," certified by signature [illegible], 29 January 1925 in Dushanbe (handwritten), TsGART, f. 4, op. 1, d. 28, ll. 16a-b; and Botakoz Kassymbekova "Humans as Territory: Forced Resettlement and the Making of Soviet Tajikistan, 1920-38," *Central Asian Survey*, vol. 30 (3-4), September-December 2011: 352.

[11] Paul Bergne, *The Birth of Tajikistan: National Identity and the Origins of the Republic* (New York: I. B. Taurus, 2007), 32.

[12] Record of proceedings no. 6 "of the 27 November 1923 meeting of the Dikkomissia [EB TsIK]," signed by Mulin (Chairman), Usman (Member), Khojaev (Member), and Postnek (Secretary), with many others in attendance, TsGART, f. 1 (Extraordinary Dictatorial Commission on Affairs of East Bukhara, under the Bukhara Central Executive Committee of the Bukharan People's Soviet Republic, 1920-1924), op. 1, d. 12, ll. 8a-b (full document is ll. 7a-9a); Record of proceedings no. 7 "of the 2 December 1923 meeting of the Dikkomissia [EB TsIK] in East Bukhara," signed by Mukhamidiev (Chairman), Mulin (Member), and Postnek (Secretary), and also attributed to Rakhmatulla (Member), Kameldzhanov (Member), with many others in attendance, TsGART, f. 1, op. 1, d. 12, ll. 13a-14b (full document); and Nazrulloev, 1979, 27.

[13] "Transport and Connection," TsGART, f. 19, op. 1, d. 539, ll. 28, 41 (full document is ll. 28-41); "Plan for Trade," TsGART, f. 19 (State Planning Committee of the Tajik ASSR, 1925-1929), op. 1, d. 504, ll. 61-74 (full document); and Iu. Poslavskii, "Ekonomicheskii ocherk Tadzhikistana," *Tadzhikistan: Sbornik statei; S kartoi* (Tashkent: Obshchestvo dlia izucheniia Tadzhikistana i iranskikh narodnostei za ego predelami, 1925), 229.

Hopeful officials in the autonomous republic called for rapid change to the quality of internal transportation as well. For upper-level authorities among the first settlers of the Tajik ASSR, the experience of mobility had a profound impact on their economic priorities. B.V.Tolpygo, the Executive Secretary of the Uzbekistan SSR Orgbiuro in the Tajik ASSR was dissatisfied at the quality of the estimated total of about one thousand versts of tracts often known as "roads." He recommended that five hundred versts be upgraded from mostly pack animal trails to roads traversable at least by carts.[14] The arrival of the first ever car in Dushanbe in 1926 was a sign of immense improvement. The machine was a part of a convoy of fifteen passenger cars sent to serve the newly opened automobile road from Termez to the capital, which was further distinguished by its gravel surface layer—rare on Tajikistan's roads.[15] V. D. Karamov, even though he was at the time laboring on the railroad project between Samsonovo and Termez, knew of the accomplishment and views of its significance. He later recalled that "the event caused such a sensation that it was on a level far beyond that caused today by the launch of a trolleybus or of a large power plant. Even worldly people considered the passage of a car from Termez to Dushanbe to be a wonder."[16]

Karamov was well placed to comment on the impact of roads and changes to mobility on daily life in Tajikistan. After the line reached the capital in the fall of 1929, he was reassigned as director of the Termez-Dushanbe Railroad Region. Even at his high post, pedestrian matters of encumbered mobility made his life difficult at every level. Complicated access to food and

[14] "Regarding workers," RGASPI, f. 62 (Central Asia Bureau of the Central Committee of the All-Union Communist Party, 1922-1934), op. 2 (Documents, 1922-1934), d. 185 (January 1925-January 1926), ll. 75-76, 82 (full document is ll. 72-82).

[15] Nazrulloev, *Dorozhnoe stroitel'stvo*, 34.

[16] V. D. Karamov, "O proshlom," in *Govoriat stroiteli sotsializma v Tadzhikistane (Vospominaniia uchastnikov stroitel'stva sotsializma v Tadzhikistane)*, ed. A. M. Bogoutdinov (Dushanbe: Izd "Irfon," 1967), 70.

shelter in his private life mirrored difficulties acquiring equipment and other supplies for the work he managed. The situation led him to frequently request relief from this post, and for permission to leave the region—perhaps to return to his home village in the Armenian SSR.[17] Tasked with improving and developing local transportation, he immediately became involved in the Stalinabad-Qurghonteppa Railroad project too. Eventually, he came to hold other significant posts in transportation development throughout Tajikistan, making him an important figure who had observed and participated in the development of mobility, from the ground up.

Karamov and other officials encountered experiences at work and private life in Tajikistan during the 1920s and 1930s that shaped the manner in which Soviet institutions approached the relationship between economy and mobility. To them, the republic was characterized by a condition they referred to as "roadlessness" (*bezdorozhnost'*). The designation helped them describe the challenges to economic growth in terms of the landscape of Tajikistan. After the NTD, many authorities cast *roadlessness* as a "fundamental obstacle" to economic growth, equivalent to institutional disorganization, ubiquitous illiteracy, and guerilla rebel assaults.[18] In Tajikistan of the 1920s and 1930s, however, roadlessness denoted more than shorthand for landscape and technical categorization. It was a way to describe the experience of being on and traveling across the territory, for researchers and military expeditionary parties,

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[17] Message regarding business with "citizen Burkanov," addressed to RKI (in Stalinabad), copy no. 4112, attributed to the Termez-Dushanbe Railroad Administration under the NKPS Management of the Central Asian Railroad, signed by Karamov (Deputy Head of Operations) and Shketik (Head of the Financial Division), 17 November 1929, TsGART, f. 350, op. 1, d. 23, l. 12 (full document); Message addressed to the RKI of the Tajik SSR, signed by Munzin Burkhanov (private citizen), 14 November 1929, TsGART, f. 350 (People's Commissariat of the Workers' and Peasants' Inspectorate of the Tajik SSR, 1929-1932), op. 1, d. 23, l. 13b (full document is ll. 13a-b); RGASPI, f. 121, op. 2, d. 235, l. 109; and A. Vishnevskii, "Stroitel' dorog," in *Za narodnoe delo: Sbornik statei*, ed. P. Evteev (Dushanbe: Izd. "Irfon," 1970), 278.

[18] See, for example, RGASPI, f. 62, op. 2, d. 680 (February-October 1926), l. 105; and RGASPI, f. 62, op. 2, d. 680, l. 138. For a summary scholarly characterization of Tajikstan's roadlessnees up to the mid-1920s, see A. Ismoilov, *Naqliyoti Tojikiston*, (Dushanbe: Nashriyoti Davlatii Tojikiston, 1962), 42-45.

engineers and laborers, as well as for native residents. The implied comparison to a place where mobility was easier or better was based firmly in felt and measured physical phenomena.

My emphasis on officials' experiences in, and on their assessments of, the territory of Tajikistan leads me to a somewhat different view of the Russian Soviet concept of 'roadlessness' from that iterated in other North American and European scholarship. Lewis H. Siegelbaum, for example, sees *bezdorozhnost'* as both a metaphorical and material term. Metaphorically, it was associated with the "sense of being lost of in a swamp, of aimlessness…the polar opposite of the 'path to socialism.'" Here, the term defined standards of modernity to be achieved by society in connection with mobility, and its meaning changed over time as Soviet technological and capital capacity, as well as ambitions, became greater. Materially, it referred to the "paucity of roads and the poor condition of roads," near Moscow and Leningrad, and in the far reaches of the USSR.[19] To Siegelbaum, 'roadlessness' was almost synonymous with *rasputitsa*, which refers to seasonal impassibility of roads.[20] Other works have demonstrated that 'roadlessness' is a term that was and continues to be appropriated colloquially and regionally in the former Soviet Union to have a variety of meanings at different moments and contexts.[21]

The term *bezdorozhnost'* also should be considered more literally. I have found that state and party officials, as well as published authors often used *bezdorozhnost'* in a very concrete sense with reference to borderlands, whether outer regions within Russia, or republics of the

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[19] Lewis H. Siegelbaum, *Cars for Comrades: The Life of the Soviet Automobile* (Ithaca: Cornell University Press, 2008), 134-136.

[20] Lewis H. Siegelbaum, "Roadlessness and the 'Path to Communism': Building Roads and Highways in Stalinist Russia," *Journal of Transport History* 29, no. 2 (September 2008): 282.

[21] See, for example, Tatiana Argounova-Low, "Roads and Roadlessness: Driving Trucks in Siberia," *Journal of Ethnology and Folkloristics* 1, no. 6 (2012): 76-77; and Yulian Konstantinov, "Roadlessness and the Person: Modes of Travel in the Reindeer Herding Part of the Kola Peninsula," *Acta Borealia: A Nordic Journal of Circumplar Societies* 26, no. 1 (2009): 27-49.

USSR, and especially Tajikistan.[22] To be sure, "landscapes are simultaneously of the mind and in the world."[23] In popular culture of the early Soviet Union, the term *roadlessness* was used to gage both civilizational progress and physical conditions. A 1937 article pronounced the role of roads construction in the advancement and flowering of a multi-cultural Soviet society and economy where there once had been "backwardness."

> In places where roadlessness had existed for ages, separating the borderlands from culture—where people trudged primitively on trails, scrambled on rocks, waded across rivers and got stuck in morass, using sledges instead of carts—there are now in many such regions of the country well-built roads and durable bridges traversed by Soviet automobiles.[24]

Read alone, this passage could be analyzed as yet another Orientalist vindication of Soviet (imperial) progress and, less obviously, Russian (imagined) ethnic superiority. And, it is. The article also, however, referred to things that were material, which changed in quantitatively measureable ways, and to actions and events that were not substantially of the mind or ideology. It plainly described the increased, country-wide connectivity as a result of roads construction in regions of Russia such as the North (where 3,600 kilometers of new roads were built, while 22,000 kilometers were repaired by the time of publication in 1937), and the Karelia ASSR (with 1,000 kilometers of new roads since the Revolution). It also notes various 'parts' of more familiar borderlands like Georgia (where kilometers of roads grew from 2,280 in 1914 to 10,500 in 1935), Dagestan (where 3,200 kilometers of road were built in just five years), and Kazakhstan (where the kilometers of automobile roads rose from 52,805 in 1911 to 101,608 in

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[22] Siegelbaum's different definition is partially attributable to a source-base that is more *cultural* than mine, and perhaps also to the fact that his work focuses on Russia (though it sometimes reaches beyond to make broader generalizations about the entire USSR). Kassymbekova also sees *bezdorozhnost'* as a physical reality delaying Soviet state-building of Tajikistan. See "Humans as Territory," 352-54.

[23] Nick Baron, "New Spatial Histories of Twentieth Century Russia and the Soviet Union: Surveying the Landscape," *Jahrbücher für Geschichte Osteuropas, Neue Folge* 55, no. 3 (2007): 377.

[24] N. Vasil'evich, "Ot bezdorozh'ia—k kul'turnym dorogam," *Doroga i avtomobil'*, no. 11 (1937): 43.

1936).[25] The article does not mention Tajikistan, nor any of its regions. A later Tajik source, however, estimated that by the start of the Second World War, the republic's territory hosted 250 kilometers of railroad, 1,800 kilometers of dirt road, and more than 100 kilometers of paved highway.[26] Statistics on Soviet roads were often, however, confusing and contradictory, as Siegelbaum points out. Categorizations of various kinds of roads, and estimates of what constituted their length and completion, varied from source to source.[27]

The landscape I am addressing is less the one of perception, and more one of physical potential, action, and experience. I conceive of the problem of Soviet landscape in Tajikistan in a way common with the "non-representational theory" school of landscape phenomenology. From this perspective, nature and environment are not only the container and object of human activity, but also negotiate it as active participants. As a result, "the act of representing (speaking, painting, writing) is understood by non-representational theory to be *in* and *of* the world of embodied practice and performance…the world is understood to be continually in the making—processual and performative—rather than stabilized or structured via messages in texts and images…"[28] For Tim Ingold, a prominent contributor to this school, this is a way of dissolving dichotomies between culture and biology. His "dwelling perspective" promotes the acknowledgment of human structures (real or imagined) as existing in and shaped by the present. It holds that built and natural environments "are never complete but continually under construction, and have life-histories of involvement with both their human and non-human

[25] N. Vasil'evich, "Ot bezdorozh'ia": 43-46.

[26] Ia. Bronshtein, "Vliianie transporta na razvitie ekonomiki Tadzhikistana," *K probleme vyravnivaniia urovnei ekonomicheskogo razvitiia soiuznykh respublik (na primere Tadzhikskoi SSR)*, ed. Iu. I. Iskhakov et al. (Dushanbe, 1968), 66.

[27] Siegelbaum, "Roadlessness": 285.

[28] John Wylie, *Landscape* (New York: Routledge, 2007), 159, 164.

inhabitants."[29] Soviet officials' demands and declarations about the desire to fill Tajikistan with roads were always accompanied by descriptions of how its landscape was not yet to the liking of the state under construction.

The concern with roadlessness exposed the hybrid qualities of this Soviet landscape in southern Tajikistan. Here, efforts to promote a particular built environment were especially vulnerable to factors beyond human intention at a time of state weakness. In the 1920s, commentators used the term "roadlessness" to describe how transportation in the territory compared to that of other regions, as well as to express their assumption that a viable Soviet landscape was a *roadful* one. Karamov recalled the character of mobility in early Tajikistan from the vantage of a very different era in Tajikistan four decades later.

> Mountains, lined with trails, hot, waterless valleys, villages of dilapidated nomad tents, the occasional semblance of a fortress with wattle and daub walls—the castles of local beks of the era of the amirate. This was the landscape of East Bukhara of the recent past. One could walk the length and breadth of pre-revolution Tajikistan without encountering a single, marginally decent road. The [local] population exclusively used pack-animal transport. Not infrequently, goods were hauled long distances by humans, since [many] mountain trails and ravines could not be traveled by even a donkey…. It was a completely roadless land.[30]

Karamov's account, however subject to romanticizing the past, expressed experiences of travelling the land that accurately addressed the methods and feasibility of movement in the tsarist and early post-tsarist era of East Bukhara. Economic mobility happened by rafting on rivers that had never been engineered, as well as on dirt roads and paths through valleys and passes, traversable mainly by pack animals, rarely by carts pulled by draft animals, and some

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[29] Tim Ingold, *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill* (New York: Routledge, 2011), 154.

[30] Karamov, "O proshlom," 65.

only by humans.[31] The danger that socialists associated with moving through this territory corroborated native residents' characterizations of mobility. For example, the steep slopes of the south-westerly route from pre-revolution Qurghonteppa to Qobodiyon earned it the Tajiki nickname of "*dan-dan-shikan*" ("the broken teeth").[32]

Exploring Roadlessness in Southern Tajikistan

The schema for roads development in southern Tajikistan was based on planners' knowledge of regions targeted for agriculture. Further work on infrastructure, as well as related economic ambitions, required more surveys to specify routes, forms of road, capital needs of construction, and schedules. In the unique conditions of this territory, roads surveying was conducted alongside all forms of study to overcome what officials saw as a disabling lack of data about the landscape.[33] As a result, surveys for roads planning often had the character of larger exploratory missions. This section analyzes the impact of surveys on larger ambitions for the economic landscape of Soviet Tajikistan. I trace their reciprocal influence on the form of the Stalinabad-Qurghonteppa route as it was surveyed in early stages, which set the tone for infrastructure development practices during the first five-year plan. The mutual dependence of roads and resource exploitation projects limited the extent to which either could be explored. In the interest of rapid development, explorations of Tajikistan's economic potential had fixated on reviving existing agricultural regions and populated centers of southern Tajikistan.[34] Since roads were

[31] TsGART, f. 19, op. 1, d. 539, ll. 28, 41; TsGART, f. 19, op. 1, d. 504, ll. 61-74; and Poslavskii, "Ekonomicheskii ocherk Tadzhikistana," 229.

[32] Nazrulloev, *Dorozhnoe stroitel'stvo*, 14-15.

[33] See, for example, Komissiia Sredne-Aziatskogo Ekonomicheskogo Biuro po Delam Tadzhikistana, preface in *Narodnoe khoziaistvo Tadzhikistana* (Izd. Gosplana Tajik ASSR, 1926), iii.

[34] I. E. Khodorov, "Perspektivy khoziaistvennogo razvitiia Tadzhikistana," in *Narodnoe khoziaistvo Tadzhikistana*, 343.

meant to serve targeted agricultural regions, they tended to travel familiar territory, where discovery of new agricultural or mining resources was less likely.

The legacy of Tajikistan's territory represented a unique challenge because Soviet institutions aspired to replicate forms of environmental management there that it used elsewhere in the USSR. The deployment of roads infrastructures and modes of mobility, along with the replication of Union-level agencies at the level of republics (for example, Gosplan USSR cooperated with Gosplan Tajik SSR) was part of a large state building effort to standardize quality, function, and knowledge of all forms of institutions. The same process had already taken place in other countries, including in early nineteenth century Britain, the inventor of the "infrastructure state." According to Jo Guldi,

> building with advanced planning was characterized by the production of a homogenous swath of space around the highway that was made uniform across the entire nation without regard to local differences in geography or political structure….The very landscape to either side of the road became part of a technological system standardized for use.[35]

In the case of Soviet railways, highways, and dirt roads, standardization occurred through an evolving system of classifications related to the perceived purpose and significance of a road, which in turn impacted its funding and services as it was planned, constructed, and later maintained.[36]

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[35] Jo Guldi, *Roads to Power: Britain Invents the Infrastructure State* (Cambridge: Harvard University Press, 2012), 72.

[36] See, for example, Cover letter for "Proposal of guidelines for classification of highways and dirt roads," addressed to Gosplan of the Tajik SSR, copy no. 2144, attributed to Central Department for Highways and Dirt Roads and Automotive Transport known as "Tadzhglavdortrans" (TGDT) under the SNK Tajik SSR, signed by Dadabaev (Director of TGDT) and Evreinov (Director of the Economic Planning Department), 10 June 1930, TsGART, f. 18, op. 1, d. 102, l. 447 (full document); and "Proposal of guidelines for classification of highways and dirt roads," signed by Dadabaev (Director of TGDT) and Evreinov (Director of the Economic Planning Department), TsGART, f. 18, op. 1, d. 102, l. 448 (full document is ll. 448-49).

In Tajikistan, however, the unfamiliar, inaccessible landscape made interpretation difficult—to say nothing of classification. In May of 1925, the Central Asia Bureau commissioned a report titled "Report on a Tour of Tajikistan," which it sent on to several offices in Moscow. It confirmed that transportation in Tajikistan was both difficult and expensive. But it argued that a proper assessment of this and other sectors required greater study. "It is hard to determine the economic potential of the country since there are no statistical materials, credentials, [or] financial data. Nor are there any exchange offices, nor railroads, nor any places" from whence to receive information about pre-revolutionary economy and land.[37]

Most exploratory research of Tajikistan consisted of short investigations, conducted in preliminary fashion, sometimes because of a lack of resources, and less often out of dismissiveness at the unfamiliar and unwelcoming environmental conditions of the territory.[38] One key Gosplan publication of 1926 is based, to a large extent, on only about three months of work accumulated between two expeditions to Tajikistan. Notably, they somehow conducted their work between the spring months of February and April, when travel within the country was very difficult.[39]

Those who researched the roads of southern Tajikistan were tasked with finding the most convenient and cheap routes, which also would best serve maximal exploitation of natural resources. Their reporting frequently revealed awe and concern with the challenge presented by the land, which was categorically different from that encountered elsewhere in Central Asia. In

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[37] "Report on the mission to Tajikistan," addressed to the Central Committee of the Russian Communist Party in January 1925 (attached to summary report at RGASPI, f. 17, op. 33, d. 444, ll. 12-13), RGASPI, f. 17 (Central Committee of the Communist Party of the USSR, 1898, 1903-1991), op. 33 (Correspondence of the Office of the Secretariat and the Secret Section with local party organizations, 1920-1929), d. 444 (January-July 1925), ll. 22-23 (full document is ll. 14-28).

[38] Poslavskii, "Ekonomicheskii ocherk Tadzhikistana," 179.

[39] Preface, *Narodnoe khoziaistvo Tadzhikistana*, iii.

September of 1926, an engineer named Lemonus reported to the Central Asian Department of Local Transportation about his study of what would become the Southern Circle. He clearly wanted to be fairly technical, giving grades, heights, and distances, but his report is also filled with descriptions of a difficult landscape. The character and condition of roads is ever changing and often treacherous beyond expectation, rising and falling on passes, along mountains, and across steep chasms and rushing waters. In one passage, he explained that on an earlier leg between the villages of Kofarnihon and Vakhsh (which are also the names of rivers), the road could be traveled by carts, though in some places it was so narrow and steep that the driver needed to use his own hands to prevent the vehicle from falling down the hill.[40]

The problems he faced were not unlike those facing the Termez-Dushanbe Railroad project concurrently under construction. Work persistently encountered unanticipated delays caused by landforms. Building crews frequently found that surveys took longer than expected. Just as often, they needed to be scrapped and redone. Shortly after the Termez-Dushanbe Railroad came under construction in 1927, an engineer named Dubrovin stopped work following a second study he conducted. He alleged that the original survey and the budgeting had not properly taken into account significant "technical complications" caused by the physical landscape, including the need to traverse several gorges of up to seventeen meters deep.[41] In the documents I have seen, Dubrovin comes off as humbly fixing the work of other engineers,

[40] Report "on the expedition on the roads of government significance of the T[ajik] ASSR [September/October 1925]," attributed to Lemonius (Representative of SAZOMES, and Engineer), TsGART, f. 19, op. 1, d. 519, l. 89 (full document is ll. 89-95).

[41] Report addressed to the "Deputy of the U.Ts. in Central Asia," attributed to Dubrovin (U.Ts.G. Engineer), certified in Tashkent by Tolstiakov (Secretary of the "Government of the Tajik ASSR"), 29 October 1927, TsGART, f. 19, op. 1, d. 541, l. 40 (full document is ll. 40-41).

attributing their mistakes to a lack of knowledge of Central Asia, and to the fact that the route faced many topographical challenges as it neared the Tajikistan border.[42]

Having traveled inside that boundary, Lemonus recommended practices that ultimately confirmed the character of roads construction in the Autonomous Republic in Tajikistan. He called on his employers to seek limited roadwork because of what he saw as an insignificant level of funding currently available. Instead of trying to enlarge pack animal paths into draft and carting roads, he recommended repairing particularly dangerous stretches. "On those trails that cause wreckage: construct safe bridges, widen paths on slopes, strengthen the baskets used to cross gorges on lines, and place signs at the intersection of routes." Above all, though, he called for much more surveying and study of the land so that possible road plans would be viable when funds and projects were forthcoming.[43] These recommendations more or less corresponded to the approach employed by the Soviet regime in Tajikistan. Few new major roads were constructed, while those commonly used were maintained for basic functionality. Although the greatest rise of automobile capable roads linking regions to the capital occurred during the first five-year plan, they were built quickly, with participants knowing their many defects, sub-par technical standards, and that they would need reconstruction.[44]

The case of the Termez-Dushanbe Railroad confirms that work on even priority transport was conducted shoddily to enable greater economic objectives. Its early construction, as with the roads, was provisional and understood to be needing later improvement. This approach

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[42] "Report on the issue of the construction of the Termez-Dushanbe Railroad (Dzhar-Kurghan to Surkhan-Kuterma leg)," signed by Dubrovin (Senior Engineer, Representative of NKPS in Central Asia), TsGART, f. 19, op. 1, d. 530 (t. 1), l. 115b (full document is ll. 113a-116a), introduced by cover letter no. 1412, addressed to the Representation of the Tajik ASSR, attributed to the Representation of NKPS in Central Asia (in Tashkent), 20 August 1927, TsGART, f. 19, op. 1, d. 530 (t. 1), ll. 12a-b.

[43] TsGART, f. 19, op. 1, d. 519, l. 94.

[44] Karamov, "O proshlom,", 72.

accommodated the weak state and its imperfect knowledge of the land it claimed to govern. A report by the Workers' and Peasants' Inspectorate (RKI) from as late as the summer of 1929 explained that "secondary surveys" and new work to improve lines that had been built within the last year should not been seen as wasted work, but as necessary to the effectiveness of the railroad. Another statement from the same organization explained that, though bridges were preferred for river crossings, a lack of knowledge about water flows in southern Central Asia meant that culverts were temporarily preferred because of their technical simplicity. In some areas, even roadbeds were designed to be short term. As a result, the speed limit on the railroad remained at a low 20 kilometers per hour to avoid destruction by the passage of trains.[45]

The ongoing exercise of surveying routes also reflected the decentralized character of planning and work implementation. Tracts that were pre-, post-, or under construction, were subject to competing research of people commissioned by the various Union and Central Asian agencies involved in planning and management of work. Organizations ranging from NKPS and RKI, to the Central Asia Bureau and the Tajikistan SNK, often disputed, resurveyed, and renegotiated routes and work plans. Officially cooperative, though often in conflict, these agencies worked together in complicated ways that included sharing budgets, laborers and other forms of capital, as well as logistics.

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[45] "Clarification by the SAZ[OMES] administration regarding [its] comments on the report about ongoing construction on the Termez-Dushanbe line, attributed to the Representation of RKI in Central Asia," signed by Puzinov, n.d., RGAE, f. 1884 (Ministry of Ways of Communication of the USSR), op. 80 (Central Administration of Railway Construction, or Glavzheldorstroi (1919-1946), d. 345 (September 1927-October 1929), ll. 37, 35 (full document is ll. 37-22); and "Statement of the commission investigating construction of the Dzhar Kurgan to Surkhan leg of the Termez-Dushanbe line, having the goal of rendering it useable by the Central Asian Railroad [administration]," attributed to Sokolov (Chairman of the Commission), Bogoroditskii (Director of Operations), Karamov (Deputy Director of Operations) et al., 26 March 1928, RGAE, f. 1884, op. 80, d. 345, ll. 192b-191a (full document), introduced by cover letter from NKPS Office of the Central Asian Railroad Section for Ways and Construction, on 10 May 1928, RGAE, f. 1884, op. 80, d. 345, l. 193.

The extent to which engineers' apparent mistakes and disagreements appear to have been tolerated is partially explicable by the unique position they held in the hierarchy of planning in roads projects globally. Guldi finds that roads engineers of nineteenth century Britain were protected by law and mission to do their best with the difficult task of translating projects planned according to general standards into scientific and mathematical terms that could be implemented locally. These experts were cast as neutral observers who facilitated projects of great scale, importance, and permanence, as if they were above politics. "The result was a kind of civil engineering characterized by its deployment of large funds to alter landscapes without regard for local social or environmental context."[46]

Although Soviet planners and engineers appear to have begun their work on the Stalinabad-Qurghonteppa Road with this type of attitude, they quickly came to terms with a physical environment context that challenged preliminary plans for how construction should unfold. Rather differently from Guldi's vision of the British infrastructure state, the Soviet mobility landscape of the 1920s and 1930s was a working compromise. Officials managing territorial legacy and material shortage opted for what seemed most possible. Their desire for rapid economic growth in targeted regions of southern Tajikistan deployed a complicated series of overlapping surveys whose purpose was to seek the shortest, most cost-effective paths for a prospective railroad, and to ensure that it could be built rapidly. The desire for a better road to Qurghonteppa became a more definite goal in 1927, when Soviet officials came to see the southern city as the administrative and logistical center of the cotton agro-development project. They wanted to join it to the capital by a higher class of dirt road, traversable by horse-drawn

[46] Guldi, *Roads to Power*, 78.

carts and automobiles.[47] The Tajikistan Central Directorate of Highways and Dirt Roads (*Glavnoe upravlenie shosseinykh i gruntovykh dorog*, or *Tadzhikglavdortrans*), hereafter TGDT, succeeded in making the route traversable by limited automotive traffic in November.[48] Continued surveying and roadwork through that year had seen a significant increase in the number of improved roads in Tajikistan. One estimate suggests that in that year wheel-capable roads totaled 1592 kilometers—of them 504 kilometers traversable by automobile—and 1088 kilometers for pack animals.[49]

In 1928, however, Tajikistan officials convinced Moscow agencies to upgrade the route from a dirt road to a railroad, and to include the project in the first five-year plan.[50] Stronger economic initiatives led officials to reconsider transportation needs between the capital and southern agricultural regions, and to lobby for the construction of a railroad between Stalinabad and Qurghonteppa. A November 1928 letter from the Tajikistan SNK to the Central Asia Bureau promoted this upgrade on grounds that this route should be prioritized after the anticipated completion of the Termez-Dushanbe Railroad.[51] The message argued that a railroad would link cotton-rich areas like Iangi Bazar while supporting a growing Qurghonteppa, which was "to be the main cotton villaiat" of the southern agricultural regions. Transport needs for commodity exchange would rise alongside projections for cultivated cotton hectares to climb from 30,000 in 1928-29 to 45,000 by the end of the first five-year plan. The letter's authors wanted definitive

[47] RGASPI, f. 121, op. 2, d. 235, ll. 105, 103, 92-90; and TsGART, f. 17, op. 3, d. 78, l. 4a.

[48] Nazrulloev, *Dorozhnoe stroitel'stvo*, 68, 71.

[49] Nazrulloev uses "wheel capable" or *kolesnye* as a collective category for roads that could carry carts and automotive vehicles. See Nazrulloev, *Dorozhnoe stroitel'stvo*, 35-37.

[50] RGASPI, f. 121, op. 2, d. 235, ll. 105, 103, 92-90; and TsGART, f. 17, op. 3, d. 78, l. 4a.

[51] TsGART, f. 17, op. 3, d. 78, l. 4a.

surveying for the railroad to take place during the 1929-30 year, which they saw as critical to ensuring that the line, including service roads, be ready by the end of the five-year plan.[52]

Environmental management and road type

The railroad project was eventually scrapped, but officials only came to that decision after a process of experimental surveys and construction on the landscape they wanted to traverse more effectively. In this section, I examine how the combined challenges of environmental management and the rush to economic growth led authorities to abandon the planned railroad in favor of a highway project. The decision to do so, moreover, was accompanied and justified by a widespread agreement about the mobility capacities of Tajikistan's territory. This land, many would conclude, was simply unsuited to railways.

Before that, however, the shift to a railroad plan demanded a whole new program of surveys and construction schemes that was set to begin in the summer of 1929. An atmosphere of extreme urgency led officials responsible for designing the new tract to forego normally cautious procedures. The pressure they felt to move quickly was derived from the tense atmosphere under the first five-year plan. Moreover, the Termez-Dushanbe Railroad was slated for completion shortly, meaning that attention and resources focused on that priority transportation project would soon be transferred to the Stalinabad-Qurghonteppa Railroad. The Central Committee of the All-Union Communist Party ordered the new line be completed by the end of the 1930 operating year, leading the representation of the Central Railroad Construction Department of NKPS to rush.[53] This transportation organization announced the commencement of surveys

[52] TsGART, f. 17, op. 3, d. 78, l. 4a.
[53] RGASPI, f. 121, op. 2, d. 235, l. 105.

exploring not one, but two possible variants for the route (one to and along the Kofarnihon River and the other straight south to Qurghonteppa). The urgent atmosphere also led it to prepare to employ available labor to do assumed work "in order to speed up the job." NKPS instructed Karamov's Termez-Dushanbe Railroad construction organization to prepare to use working drafts of construction plans to at least begin construction in the capital city.[54] These jumps to action reflected tendencies that would hinder the Stalinabad-Qurghonteppa road until it was done. Among them, moving to work before the project was defined led to wasted resources. More importantly, indecision hampered institutional will to operate quickly because officials were frequently uncertain about what routes to choose due to complicated technological challenges in the physical environment.

The indecision and confusion created by the short timelines and environmental conditions were exacerbated by the expectation that surveys and construction take place concurrently. This norm was encouraged by a Gosplan USSR official named Poliudov, who immediately halted the program of work that NKPS had initiated. Electing to greater decisiveness instead of considering alternate routes, he determined the destination of the first leg of the line as the village of Kofarnihon, east of Stalinabad, just beyond Iangi-Bazar. He ordered that these first 19 kilometers of the railroad be built by the start of the rainy season in December.[55] To overcome the fact that there was no finalized plan for even the first leg of the railroad, nor any satisfactory, trusted

[54] Message "Regarding construction of the Dushanbe-Qurghonteppa line," addressed to the Clerical Office of the SNK of the USSR, attributed to the NKPS Central Administartion for Railroad Construction, signed by [illegible] (Executive Member of NKPS), 19 August 1929, RGAE, f. 1884, op. 31 (t. 1 (Special Division of the Secretariat of the People's Commissariat for Ways of Communication of the USSR, 1921-1933), d. 1199 (April 1928-August 1929), l. 56 (full document).

[55] RGASPI, f. 121, op. 2, d. 235, ll. 107-105.

survey, Poliudov called for concurrent and ongoing "secondary surveys" that made up for the lack of a clearly planned route.[56]

Poliudov's long-distance interference may have seemed like the kind of decisiveness needed. Instead, his continued attempts to control the road project from afar prematurely set the Soviet approach to environmental management of mobility between the capital and southern regions to the form of a railroad, and only led to further setbacks in roadwork progress. Though Poliudov's orders Moscow certainly motivated work among transportation agencies based in Tashkent and Dushanbe, they did not translate into the speed that he evidently expected. The pace of surveying that first leg of the line was so slow that actual construction only started on 5 December—four days later than Poliudov's deadline for completion. The consequences of his impatience in August were borne out now by a total work stoppage that would cost the Tajik SSR and other organizations much money and time. On 19 December, Poliudov announced that an entirely new round of surveys and budgeting exercises would be conducted by a new commission comprising several union-level organizations and "engineer specialists."[57] This meant increased costs and time for several reasons. The first action corresponding to the new round of planned exploration was Poliudov's order to divert the line from the Kofarnihon to nearby Lokai Begi (which had been the preferred destination of engineers on site). Karamov's work crews would now extend the tracks three kilometers farther at a cost of 420,000 rubles more than planned.[58] As discussed in Chapter 1, moreover, work stoppages in general cost Soviet

[56] RGASPI, f. 121, op. 2, d. 235, ll. 107-106.

[57] RGASPI, f. 121, op. 2, d. 235, l. 105.

[58] Proceedings of the "meeting of the Commission of the Representation of the People's Commissariat of the Workers' and Peasants' Inspectorate in Central Asia investigating the issue of construction on the Termez-Stalinabad-Iangi Bazar railroad line," signed by Stoianovich (Commission Chairman, and Senior Inspector), Bel'kov (Engineer), Sabanin (Representative of the GUTFK audit of the Central Asian Railroad), Remnev (Representative of the GUTFK audit of the Central Asian Railroad), Anfilov (Representative and engineer of the Central Asian Railroad administration), Karamov (UDR-Z), and Egorov (Chairman of Operations Management, and engineer on

institutions money. This standstill dragged-on for six months, and Tajikistan officials became increasingly concerned about the expenses it would engender.[59]

Poliudov's erratic actions reflected Gosplan USSR's desire to entertain an NKPS proposal. The transportation agency wanted to consider replacing the planned railroad with a "concrete road" for automotive vehicles on an American model—the highway.[60] Its officials were motivated by concerns with the stark difference between Tajikistan's terrain and that of most of the USSR. The problem, ultimately, was that techniques that might have worked elsewhere encountered under-anticipated environmental challenges here. Unlike in most other parts of the USSR, there was no legacy of pre-Revolution tracks on the land for the regime to reconstruct. Furthermore, Russia in particular offered few topographical obstacles to the construction of railway infrastructure, with even the Ural Mountains offering "numerous easy passageways." Holland Hunter explains that with the exception of the southern edge of Central Asia, Western Siberia, and certain eastern regions of the USSR, "in general it can safely be said that the USSR is fortunate in the topographical conditions it offers for railroads."[61] In the mountains of Tajikistan, moreover, the growing consensus was that it was simply easier to build automobile roads.[62] So, over the course of the winter and early spring months, several agencies conducted a variety of surveys, producing reports based on these as well as earlier studies.

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the Termez-Iangi Bazar [line]), 18 February 1930, in Stalinabad, RGASPI, f. 121, op. 2, d. 235, ll. 89a-b (full document is ll. 89b-82b); and RGASPI, f. 121, op. 2, d. 235, l. 106.

[59] Message addressed to Khojibaev of Permanent Representation of the Tajik SSR in Tashkent, attributed to Anvarov (Moscow), n.d. (late 1929), TsGART, f. 18, op. 1, d. 93, l. 2 (full document).

[60] Message from Anvarov sent to Kodjibaev of the Tajik[istan] Permanent Representation in Tashkent, received 28 December 1929, TsGART, f. 18, op. 1, d. 93, l. 98 (full document); and TsGART, f. 18, op. 1, d. 93, l. 2.

[61] Hunter, *Soviet Transportation Policy*, 18, 42; Mellor, "The Soviet Concept of a Unified Transport System," 88-93.

[62] Ia. Shapirov, *Iz istorii postroeniia fundamenta sotsializma v Tadzhikistane (1929-1932 gg.)* (Stalinabad: Izdatel'stvo akademii nauk Tadzhkskoi SSR, 1960), 34.

Although the NKPS proposal was eventually successful, most related reports resisted the new perspective on railroads. They argued that the greater initial expenses of constructing tracks would rapidly be justified by their far greater cost-effectiveness in use by comparison with a highway. Quite simply, these opponents to the change estimated that railroads could carry much more freight more cheaply than automotive roads, and that railroads required less ongoing maintenance after they were built.[63] A February report in favor of the railway argued that its greater profitability would "within the next few years offset the difference in the cost of construction."[64] A table in this report provided figures that were repeated in many other documents on the subject, as reproduced in Table 2.

Table 2. Comparative costs of railroad and highway (*avto-shosse*) construction on a Stalinabad-Qurghonteppa route (1930)[65]

Key cost indicators (in rubles, unless noted otherwise)	**Railroad**	**Highway**
Total cost of construction	35,000,000	13,905,500
Cost per kilometer	360,000	124,000
Annual operational cost (*Ezhegodnye eksploatatorsk. raskhody*)	5,426,000	16,558,000
Operational cost per ton of freight (kopeks)	7.8	20.1

The authors of such documents were conscious of the fact that the surveys serving as the basis for these comparisons and planning were only "conducted tentatively," and rarely gave consideration to non-railway possibilities.[66] They made up for such uncertainty by focusing on

[63] Internal report "of the Commission of the RKI of Central Asia on the issue of constructing the railroad to Qurghonteppa," attributed to Stoianovich (Senior Inspector of the RKI of Central Asia), certified by Makarevskii (Secretary of UDRZ), n.d. (February 1930), TsGART, f. 18, op. 1, d. 93, l. 168 (full document); RGASPI, f. 121, op. 2, d. 235, ll. 107-103.

[64] RGASPI, f. 121, op. 2, d. 235, ll. 105-104.

[65] RGASPI, f. 121, op. 2, d. 235, l. 103.

[66] RGASPI, f. 121, op. 2, d. 235, l. 104.

the larger economic context. Proponents of the railroad argued that up-front costs would be rapidly repaid by the economic growth of the Qurghonteppa region, as reasoned in another report.

> "Considering that the *roadless* period will go on for several more months and that, in this period, shipping cargo will be expensive…and furthermore there are well known obstacles to carting transport, and that the construction of roads for automobiles or carting is not expedient, it follows that we should choose to construct a railroad."[67]

Authors of studies comparing road types rarely, however, gave such explicit suggestions or conclusions. Evidently, supporting one form or the other involved high stakes. Though most reports favored railroads over highways because of long-term cost comparisons, they usually deferred to the reader with phrases like "the final choice of this type of road or of the other presents itself for your disposal."[68]

Officials were drawn to the highway project because of the lesser "technological" and labor requirements, its lower costs, and to the fact that they could thus build it faster. Problems referred to as "technical" involved construction challenges in the native physical environment, which involved the likelihood of wasted resources. These issues of terrain as one RKI official explained, resulted in "the lack of a clear plan and the hesitation with respect to choosing variants for temporary routes…have created uncertainty concerning the deployment of survey workers, and the surveys themselves."[69] Others explained that the considerations that led to a Soviet preference for railroads did not suit the actual needs of transportation infrastructure in Tajikistan. Freightage within the republic, they argued, was low-intensity by comparison,

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[67] Italics inserted. RGASPI, f. 121, op. 2, d. 235, l. 103.

[68] Internal report "Regarding the comparison of a railroad and a highway [as forms of road between] Stalinabad and Qurghonteppa," no attribution, n.d., TsGART, f. 18, op. 1, d. 93, l. 135 (full document is ll. 134a-135a).

[69] TsGART, f. 18, op. 1, d. 93, l. 167.

characterized by relatively light freight and passenger flows on relatively short distances. Automobile roads were simply far more rational as instruments of mobility than risky railway routes of the low quality that were being built.[70] Already while the Stalinabad to Iangi-Bazar leg was under construction, for example, laborers unaccustomed to the regional environment mismanaged the semi-frozen winter soils making up the bed of the railroad track. An RKI report explained that "when this thawed, the road began to come apart…causing almost daily derailment of freight shipments."[71]

Ongoing surveys indicated that highways were also a better short-term option for managing other challenges to mobility inherent in the physical environment. In fact, water was perhaps the greatest ongoing concern and threat to transportation infrastructure. Since the establishment of Tajikistan, planners and engineers involved in roadwork and irrigation development voiced concerns about their ability to construct effective infrastructure with their insubstantial knowledge of water flow patterns in the republic. Roads surveying was conducted virtually alongside studies of "hydrometeorological" data in order to better understand seasonal precipitation and the behavior of waterways, especially with respect to assigning bridges to particular locations.[72] Experts involved in the railroad project warned that the "enthusiasm for this non-existent project could lead to problems with the diversion of water" from the structures of the railway, and was the reason why many bridges were constructed as the "temporary

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[70] B. V. Semashko, "Perspektivy razvitiia avtodorozhnogo transporta v Tadzhikistane," in *Problemy Tadzhikistana: Trudy pervoi konferentsii po izucheniiu proizvoditel'nykh sil Tadzhikskoi SSR*, ed. A. E. Fersman et al., vol. 1 (Leningrad: Izdatel'stvol akademii nauk SSSR, 1933), 209-211. Semashko stated that the issue of the Stalinabad-Qurghonteppa road project was a lesson not to be repeated in this republic because of a Soviet preference for railroads. He also argued that railroad construction would never be possible throughout much of Tajikistan.

[71] RGASPI, f. 121, op. 2, d. 235, ll. 106-105.

[72] Extract from Record of proceedings no. 28 of the 25 September 1929 meeting of the SNK Tajik ASSR in Stalinabad, certified by signature of Chernousenko (Clerk at Tadzhdortrans), TsGART, f. 18, op. 1, d. 102, l. 53 (full document).

type."[73] Persistent concerns with the power of water were justified in the summer of 1930, when the Tajikistan Central Committee Secretary complained that recent "meteorological events" had destroyed bridges, irrigation ditches, and cotton crops, making travel on both roads and in fields more difficult.[74] Later that year, the Central Asian Affiliate of the Automobile Road Research Institute initiated a project to study "hydrometeorological influence on dirt, gravel, and paved roads" in hopes of overcoming the environmental challenges to economic growth in Tajikistan.[75]

The solid terrain caused surveying engineers even more trepidation. The diversity of the possibilities that they considered reflected the challenge that the territory of Tajikistan represented the next stage of the Stalinabad-Qurghonteppa route involved traversing the "high, mountainous Rangon Ridge." Those routes that were most seriously considered traveled by a combination of bridge, tunnel, or pass by way of either the Sangarsk Pass, the Zerdoli Pass, or their ultimate choice of the Tiuia-Nazar Pass.[76] Only in the case of the Sangarsk Pass were automobile roads also concurrently considered. Survey results showed that an automobile road was a far cheaper and easier endeavor. The cheapest automobile highway (class 6) would cost about 124,000 rubles per kilometer. The most expensive of three other possible highway routes was just twelve thousand more. Surveyors found that the least costly option for a road was to cross the ridge at the Sangarsk Pass, where the landform was narrowest, at an average cost of 360,000 rubles per kilometer. A railroad going by that route, meanwhile, was double the cost of a

[73] RGASPI, f 121, Op2, d. 235, l. 89a.

[74] RGASPI, f. 121, op. 2, d. 235, ll. 89b-88a.

[75] Report on the "Status of the Central Asian Affiliate of the Institute for Scientific-Research on Highways," TsGART, f. 18, op. 1, d. 131, l. 226 (full document is ll. 226-230), introduced by a cover letter addressed to Dortrans, copy no. 9.158/29.229, attributed to Kordiukov (Administration), received on 4 July 1930, TsGART, f. 18, op. 1, d. 131, l. 225.

[76] TsGART, f. 17, op. 3, d. 78, l. 4a; TsGART, f. 18, op. 1, d. 93, ll. 134-36; and Nazrulloev, *Dorozhnoe stroitel'stvo*, 71.

highway because the tracks would have to cross the ridge via 1.42 kilometer-long tunnel, rather than by a pass.[77]

A highway for a different Soviet landscape

The evidence in favor of the highway project swayed the various union level-institutions involved in the Stalinabad-Qurghonteppa road project, and initiated new negotiations for funds and planning. Executive approval was important because the project had major implications beyond its relevance to the Tajik SSR's economy. The new plan for the Stalinabad-Qurghonteppa Highway would be, based on new discussions with "Americans." As throughout the USSR, American engineers and expertise, as well as equipment, were used to accelerate economic growth in Tajikistan, particularly in the development of irrigation infrastructure in the Vakhsh River Valley.[78] The move to switch road types moreover represented abandoning some autonomy in transportation since railroad construction in the USSR was one of the few economic sectors where foreign expert advice was not desired.[79] Consulting with foreign experts was a serious matter, and thus required high-level justification. The key authorities involved were Poliudov and M. D. Guseinov, the First Secretary of the Central Committee of the Communist Party of Tajikistan. STO and RKI were also influential in the adoption of the plan.[80] Spurred by the news of the change of project, executive members of the Tajik SSR SNK and of TGDT

[77] TsGART, f. 18, op. 1, d. 93, ll. 134-136.

[78] See Maya Karin Peterson, "Technologies of Rule: Empire, Water, and the Modernization of Central Asia, 1867-1941" (PhD diss., Harvard University, 2011), 385-450.

[79] Matthew J. Payne, *Stalin's Railroad: Turksib and the Building of Socialism* (Pittsburgh: University of Pittsburgh Press, 2001), 39.

[80] RGASPI, f. 121, op. 2, d. 235, l. 109.

began to negotiate and lobby for more money and on behalf of particular possible routes for the highway.[81]

The decision in May 1930 to build a highway was thus a major turning point. It was the culmination of multi-agency negotiations, and called for a very different approach to mobility, involving new foreign participants and methods, To this extent, it was a new start, even if the same basic rationales connected the need for a better landscape of mobility to desired economic growth. The Tajikistan government went ahead with lobbying to push central USSR agencies to officially start construction of the highway that very same May. Their key obstacle was the issue of payment to "the Americans." Khodjibaev succeeded in securing an NKPS contribution of eighty thousand dollars to the one hundred thousand dollars required in advance, out of a total contracted four hundred-thousand-dollar fee. His appeals were always voiced in terms of larger scale objectives and authority, noting this money would justify the 4 million rubles newly allotted roadwork, and facilitate the "mechanization of work and transportation on the [southern] circle" road.[82] He argued that doing so would "realize the Union Government's objectives [with respect to production of] cotton in the Qurghonteppa okrug [being a] part of the Vakhsh issue."[83] The government was planning a major program of irrigation development for cotton agriculture

[81] Message addressed to Khodjibaev (SNK Tajik SSR), attributed to Anvarov (in Moscow), n.d., TsGART, f. 18, op. 1, d. 102, l. 69a (full document is ll. 69a-b).

[82] Message addressed to Khodjibaev (SNK [Tajik SSR]), copy no. 128, attributed to Dadabaev (in Moscow), receipt recorded at 13:00 by Alekseev and passed to Avanesov on 3 May (1930), TsGART, f. 18, op. 1, d. 102, l. 213 (full document).

[83] Message addressed to Rudzutak (NKPS in Moscow), attributed to Khojibaev (SNK Tajik SSR in Stalinabad), copied to the Representation of the Tajik SSR to the USSR, 5 May 1930, TsGART, f. 18, op. 1, d. 102, l. 219 (full document).

in the Vakhsh River valley, where Qurghonteppa was located.[84] As this new round of lobbying began, surveying continued, as did the acquisition of supplies for road construction.

In connection to the changing form of the Stalinabad-Qurghonteppa road, the prestige associated with railroad work changed. For officials like Karamov, who had been responsible for road construction and management in the republic done so far, this was also a moment of vulnerability. The move to change road types was partially brought on by the low quality of the tracks laid. May 1930 was thus a turning point in Karamov's career, and he seized the moment to defend his record and to air his concerns about how transportation should be supported going forward. As an official who worked in transportation, his appeal to preserve his own legitimacy in future operations was firmly based in the Soviet understanding of Tajikistan's landscape that had influenced conversations on economy for more than a decade. He accused the investigatory commissions that had cancelled the railroad project of being unfairly critical of not only himself, but also of the various experts and laborers on his staff, who had done their best to work hard in what he called "conditions that are unbearable for humans… which I will not dwell on here, but will detail in personal discussions." These conditions, he claimed, had led to the deterioration of his health, and were the reason why he requested relief from his post, and to furthermore be allowed to depart from the region—a desire he strongly expressed in other communications as well.[85]

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[84] Kirill Nourzhanov and Christian Bleuer, *Tajikistan: A Political and Social History* (Canberra: ANU E Press, 2013), 71.

[85] Report addressed to Comrades Guseinov (Central Committee of the Communist Party of the Tajik SSR), Zelenskii (Central Asia Bureau of the Central Committee of the All-Union Communist Party), Blagonravov (Deputy People's Commissar of Ways of Communication), and Mustu (Representative of NKPS [in Central Asia]), signed by Vagarshak Dzhavadovich Karamov (Director of the Termez-Stalinabad [Railroad] Project, Member of the Central Committee of the Communist Party of Tajikistan and Uzbekistan, and the Representative of NKPS in Tajikistan), 30 May 1930, in Stalinabad, RGASPI, f. 62, op. 2, d. 2185, ll. 45b-46a (full document is ll. 45a-46a); and Two messages addressed to Klimenko (7th region of Central Asia), attributed to Karamov (in Stalinabad), 10 July 1931 (no. 135) and 15 July 1931 (no. 138), both copied to same page, RGASPI, f. 62, op. 2, d. 2529, l. 34.

Whatever his real motivation, Karamov was a divisive figure, willing to criticize his superiors from the vantage of credibility built on knowledge and experience of working on the territory in question. This privilege evidently made him important to various authorities, and it is notable that the Stalinabad-Qurghonteppa highway project only got properly underway after his concerns were observed, and even more so after he became involved as its director. Among his supporters was RKI, which recommended his reports to Tajik authorities as they commenced planning of highway construction.[86]

Key among Karamov's recommendations was the need to match material support for roadwork to challenges of the physical environment. From his point of view, the failure of the Stalinabad-Qurghonteppa railroad project was due to "incredible troubles" that were unique to the landscapes of southern Central Asia. Here, he found it unacceptable that coordinating agencies' constant demands and expectations that his construction teams should keep pace with "tempos tied to processes of socialist reconstruction in the agricultural sectors of the Tajikistan and Uzbekistan republics." Karamov explained that "all construction departments, and all technical personnel and laborers were busy with the elimination of wash-outs."[87] Unstable soils and waters frequently damaged roads after completion, making maintenance equal in importance to construction. His operations faced "roadlessness, morass, nasty winter weather, the absence of transportation, temporary crossings [bridges], interruptions in supply, periodic productivity crises, and above all a lack of materials and a scarcity of technical equipment related to the pumping of water, etc."[88]

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[86] Message addressed to "SNK," signed by Bazhani (Deputy to the People's Commissar of the People's Commissariat of the Workers' and Peasants' Inspectorate of the Tajik SSR), and Khorin (Inspector of the Construction Group), 2 July 1930, in Stalinabad, TsGART, f. 18, op. 1, d. 93, l. 273 (full document).

[87] RGASPI, f. 62, op. 2, d. 2185, l. 45a.

[88] RGASPI, f. 62, op. 2, d. 2185, l. 46a.

Faith in Karamov's opinion was closely linked with the fate of the highway project, which ended up under his management thirteen months later. The year after the new road was approved was characterized by a massive reorganization of transportation in the republic (discussed in greater detail in Chapter 3). In early 1931, Tajikistan's SNK began following Karamov's advice, and commenced prioritizing all forms of construction capital (laborers, means of transport, and equipment) for the Stalinabad-Qurghonteppa Highway, since the project only currently had about twenty-two percent of the laborers needed, and twenty-five percent of the carts needed.[89] This effort was so momentous and successful that TGDT sometimes found itself with more equipment than it could use.[90] In the meantime, Karamov's supporters worked to ensure that he give up his current position with the Termez-Dushanbe Railroad Region to take over as head of TGDT. Officially, he took this post on 5 August 1931, though his correspondence of the previous month indicates that he did so reluctantly, finding himself caught in a turf war between controlling institutions in Tashkent—some of which evidently disliked him. Karamov had fully agreed to take the post on 28 July, when the Chairman of the Central Asia Bureau, Bauman, personally appeared in Dushanbe to convince him to officially accept the job, and to prevent interference by the Chairman of the VKP(b) in Central Asia, Klimenko. This party elite was himself the supervisor of the Central Asian railroad region, and was trying to keep Karamov as his cadre in Stalinabad.[91]

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[89] Resolution "regarding priorities in road construction in the current year, 1931," attributed to the SNK of the Tajik SSR, n.d., TsGART, f. 20, op. 2, d. 807, ll. 62-63 (full document is ll. 62-64).

[90] Internal report addressed to Serebriakov (Director of TsUDORTRANS) and Chernyi (Deputy Director of TsUDORTRANS) in response to message no. DE-27 of 11 May 1932, copied to Khodjibaev (Chairman of the SNK Tajik SSR), signed by Karamov (Director of Glavdortrans [Tajik SSR]) and Ragoznyi (Deputy Director of Glavdortrans), n.d., TsGART, f. 18, op. 1, d. 340, ll. 240-244 (full document is ll. 240-46).

[91] RGASPI, f. 62, op. 2, d. 2529, ll. 32-33, 39; Vishnevskii, "Stroitel' dorog," 285.

Karamov's accession to directorship of TGDT is closely associated with concerted progress on the Stalinabad-Qurghonteppa Highway project, as well as on other roads across the republic. One estimate suggests that during the course of Karamov's tenure at TGDT, from 1932-1936, approximately eight thousand kilometers of road were constructed. Those viewed to be most significant were the Stalinabad-Qurghonteppa Highway, as well as those from the capital to Tashkent, to Garm, and the Great Pamiri tract.[92] Some of Karamov's successes are attributable to his aggressive resistance to criticism from coordinating agencies ultimately responsible for planning, and his willingness to protect his managers from scapegoating.[93]

The time consumed while the Tajik SSR accumulated capital and find a good director of construction were major reasons why work on the highway was further delayed. These dynamics are based in a history of Tajikstan that turns on Soviet management of the physical environment to create a new economic landscape. And it leads to a different, more accurate understanding of this railroad project with all its implications, than that provided by other historians. Selective (or limited) use of sources leads scholars them to mischaracterize the chronology of the project. Nazrulloev claims that work on the road was completed by December of 1932, and that the road was opened for year-round passage on the sixteenth of that month. Up to fifty-four work brigades had labored on four different legs of the road through the year, and had a major breakthrough with the completion of the Tuia-Nazar Pass in February 1932. Where passage between the capital and Qurghonteppa had once taken three to four days, it now could be completed in several hours by automobile.[94] Shapirov simply praises the accomplishments of road work during the first five-year plan, implying that this highway was included. "Tajikistan transformed

[92] TsGART, f. 18, op. 1, d. 340, l. 241; Vishnevskii, "Stroitel' dorog," 285.
[93] TsGART, f. 18, op. 1, d. 340, l. 245.
[94] Nazrulloev, *Dorozhnoe stroitel'stvo*, 78.

itself from a land of classical roadlessness into one having a well-developed network of ways of communication."[95] In the fall of that year, Karamov also estimated that most of the "basic" work of the road had been completed during the fiscal year that was ending.[96] The Stalinabad-Qurghonteppa Highway, I believe, was probably completed to a point where it was functional with regularity sometime between late 1932 and late 1933.

Other documentation, however, shows that the work that had been completed was not sufficient, and that considerable tasks lay ahead. TGDT faced a variety of environmental challenges along the way, whose influence heightened the ambiguity associated with completion for years to come. Even those legs that had been completed were unable to stand up to the increasingly intense interactions of traffic and natural environmental factors. Karamov's fall 1932 report explained that economic growth in other sectors "significantly outpacing the development of roads economy." Whereas dirt roads may have been sufficient to local conditions and expectations in the 1929-30 fiscal year, the national economy since 1931 demanded roads having covered surfaces and new wheel roads (*novykh kolesnykh dorog*), to replace the pack animal transport that still comprised a significant position in transportation in Tajikistan.[97] "The introduction of carts and automobiles is closely tied to [the quality of] roads. The loessial soils in mountainous conditions are absolutely insurmountable for carts during the season of bad roads [*rasputitsa*], and difficult for pack animal transport of horses and donkeys."[98]

The task of overcoming the tension between the character of Tajikistan's soils and the technology used to build roads in them was not a simple matter of the state exerting sufficient

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[95] Shapirov, *Iz istorii postroeniia fundamenta sotsializma*, 39.
[96] TsGART, f. 18, op. 1, d. 340, l. 241.
[97] TsGART, f. 18, op. 1, d. 340, l. 243.
[98] TsGART, f. 18, op. 1, d. 340, l. 243.

effort and resources. Certainly, layering supplies were often in demand, and surveyors were still tasked with keeping an eye out for deposits of materials, such as gravel, suited to roadwork. A recently established Scientific-Research Institute for Automotive Transport in Dushanbe conducted ongoing work was taking place to research technologies for especially appropriate surface layers of new roads and highways, often in coordination with the Central Automobile Roads Institute.[99] Frustrated engineers continued to see parts of roads crumble away in certain places when subjected to traffic and to such natural environmental forces as changes in season and water levels. A January 1932 memo, for example, requested that a "permanent" paved surface be put on the Stalinabad-Qurghonteppa Highway because the gravel covering it had (itself rare in the region) did not stand up to the passage of heavy vehicles like tractors, nor to ubiquitous and seasonally variable run-off water.[100]

The most glaring challenge to the timeline showing completion of the Stalinabad-Qurghonteppa Highway in December 1932 was the need for a bridge across the Vakhsh River, connecting the majority of the road from the north to Qurghonteppa. In February of 1932, the SNK of the Tajik SSR set the remainder of the fiscal year's goals for work on the Stalinabad-Qurghonteppa Highway. It resolved to have the road between the capital and Uialov completed—including roadbed and surface layer, with tarring in some places. Uialov is northwest of Qurghonteppa, on the other side of the Vakhsh River. The statement specified that plans about the direction and surface materials for this last leg of the road could only be decided after the location of a connecting bridge was chosen. Surveying for this crossing, it was resolved,

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[99] A. N. Vostrov, "Sostoianie dorozhnoi seti v Tadzhikskoi SSR," in *Problemy Tadzhikistana: Trudy pervoi konferentsii po izucheniiu proizvoditel'nykh sil Tadzhikskoi SSR*, ed. A. E. Fersman et al., vol. 1 (Leningrad: Izdatel'stvol akademii nauk SSSR, 1933), 207.

[100] Message from Panov to Leonid Petrovich, n.d. (January 1932), TsGART, f. 18, op. 1, d. 340, l. 13 (full document).

could be completed by the 1 July 1932, so that preparatory work could be done in time to have it completed by the end of the following year.[101] Nazrulloev confirms that this bridge, constructed of wood, was completed in 1933, while a second, iron and stone bridge was built by 1935, along with several other "permanent bridges."[102]

Conclusion

The completed Stalinabad-Qurghonteppa Highway connected the republican capital with the center of cotton agricultural production under development. The new, Soviet built environment of these cities, agricultural regions, and the road connecting them, was a work in-progress, emerging in a form and at a tempo mediated by the native physical environment. The state's efforts to impose structures and lifeways in common with the rest of the USSR were impeded by a lack of knowledge of this land, and by the unique challenges it embodied. The Stalinabad-Qurghonteppa road and its growing network of connected roads, however, shaped Tajikistan's capacity for economic growth that depended on mobility. The Vakhsh and Kofarnihon river valleys became major centers of cotton and other agriculture, where mobility enabled resettlement and land reform that permanently changed the economic character of the land.[103] The critical role of roads in these matters was reflected in the acclaim that Karamov came to receive over the course of the 1930s, and his rise through the ranks of state and party agencies

[101] Resolution of the SNK of the Tajik SSR of 19 February 1932 "regarding road construction in 1932," TsGART, f. 18, op. 1, d. 340, l. 59 (full document is ll. 59-63); and Resolution of the SNK of the Tajik SSR of 3 April 1933 in Stalinabad "regarding road construction in the Tajik SSR in 1933," attributed to Abd. Khodjibaev (Chairman of the SNK Tajik SSR) and Rakhimbaev (SNK Tajik SSR Administration), circulated with two articles edited for publication on 11 April 1933, TsGART, f. 18, op. 1, d. 549, l. 75 (full document is ll. 74-76).

[102] Nazrulloev, *Dorozhnoe stroitel'stvo*, 82-83.

[103] K.E. Boroshilova, ed., *Bol'shaia sovetskaia entsiklopediia*, vol. 53 (Moscow: Gosudarstvennyi nauchnyi institut "Sovetskaia entsiklopediia," 1946), 443; and G. Podvorkov and B. Vainshtein, "Narodnoe khoziaistvo Tadzhikistana za desiat' let," *Planovoe khoziaistvo*, no. 2 (1935): 180.

before his death in 1956.[104] Tajikistan's new, Soviet landscape was composed of a physical environment under construction that required further study and continuous management of extant elements that could affect built structures. Without ongoing repair of current roads, they would become unusable, while water, in the form of rising rivers and unanticipated rains and run-off, regularly damaged various legs and bridges of the route.[105] The built environment and landscape of the state remained a work in-progress in Tajikistan, as basic capacities, such as dedicated road repair teams, were established during the years to come.[106]

But it would be an exaggeration to suggest, as Shapirov does, that almost overnight "Tajikistan transformed itself from a land of classical roadlessness into one having a well-developed network of ways of communication." Transportation dependent activities continued to be operate at sub-standard levels, frustrating Soviet officials of Tajikistan, as across the USSR. In 1934, for example, a letter from Dushanbe took from ten to twenty days to reach Moscow, while it required an average of from fifteen to twenty-five days to travel between regions of Tajikistan.[107] The ability to maintain and improve these routes that affected the exchange of information, commodities, and the existence of other built structures of economy. As I discuss in Chapter 3, this activity also depended on factors of transportation and logistics that were only tangentially related to the roads, especially in locations where infrastructure was still new and low standard. Material dynamics working in tandem with roads promoted the Soviet landscape.

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[104] Vishnevskii, "Stroitel' dorog," 285.

[105] Table detailing the conditions and needed repairs on various parts of the Stalinabad-Qurghonteppa Highway, signed by Val'ts (Head of the 811 DEU) and Klimchenko (Senior Technician), 1935, TsGART, f. 346 (Tajikistan Central Directorate of Highways and Dirt Roads, 1928-1938), op. 1, d. 84, l. 9 (full document); and Inventory of needed repairs coming in 1936 on the Stalinabad-Zidi section, attributed to the Head of 821 DEU and the Technical Director, TsGART, f. 346, op. 1, d. 84, ll. 462-463 (full document).

[106] Karamov, "O proshlom," 72.

[107] Shapirov, *Iz istorii postroeniia fundamenta sotsializma*, 39; Kassymbekova, "Humans as Territory," 353; Nourzhanov and Bleuer, *Tajikistan*, 103; and Peterson, "Technologies of Rule," 443-44.

Some of these, like the horse breeding complex that I discuss in Chapter 4, were means of mobility that accommodated the continuous impact of the terrain's legacy on Soviet goals.

CHAPTER 3

MOVING LIKE A STATE: COMMODITY CHAINS AND ECONOMIC GROWTH IN TAJIKISTAN

Tajikistan imported the Soviet Union. Literally. This republic's economic growth depended on capital that traveled by way of the USSR's commodity chains. The freight included exclusively basic supplies sourced in other regions: timber (round and processed), metals and metal products, concrete, and even rock, gravel, sand, and food, in addition to animals, people, machines such as automotive vehicles, and other things. This chapter will outline the nature of Tajikistan's need for commodities in the 1920s and 1930s, and some ways that this exigency was satisfied by networks of material exchange. I examine how capital was imported and distributed, by whom, and the way in which the process mediated state building as economic growth.

The operations of these goods flows were causally connected to the establishment of a physical environment for the desired economy. As I demonstrated in Chapters 1 and 2, a primary motivation for the establishment of roads infrastructure within Tajikistan and linking it to other Soviet regions was to provide new and needed platforms for transnational cargo exchange with respect to the new republic. Infrastructure alone, however, did not make commodity chains, and indeed the quality and number of roads in Tajikistan in this period was low. My analysis of shipping operations addresses the actors and agencies that participated in transporting commodities by using whatever routes were available, and sometimes despite them. I define the things moved as primary products, or as "low-value-added," basic goods, and I approach the networks they traveled in terms of the inclusive *chain* concept of world systems theorists. Jennifer Bair explains that this terminology also refers to the idea "that labor power is critical input into every commodity chain" and looks at various forms of labor management at sites

along a chain.[1] I analyze how agents of significance to Tajikistan's exchange networks participated in dynamic material relationships spanning the republic and the USSR. "'Private' sources of commodity chain power," as Kate McDonald calls such actors, comprised transnational governance.[2] The freightage activities that I evaluate involved physical connections between specific actors and locations that illuminate workings and limits of Soviet political authority and economic possibility.

This chapter accounts for some of the ways that the project goals of officials based in Moscow, Tashkent, and Dushanbe were translated into material exchange through human action, and ultimately into infrastructure construction. To achieve this, I explicitly avoid still dominant frames of understanding developed by Cold War-era scholars of economy. They promoted the view that the first five-year plan inaugurated the so-called command system, a highly centralized state bureaucracy for economic management that changed very little between the early 1930s and 1957.[3] Their body of studies is dominated by a familiar, but confusing picture: nothing worked as intended and privation was ubiquitous, and yet enterprises flourished as gargantuan efforts continued. So, how did it work? I contend that the daily operations of commodity chains successfully supported material changes under socialism because they were characterized by market relations. Shipping agencies and their agents, as well as the clients they served, engaged in freightage through activities that were frequently outside the plan. Often, deliveries were

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[1] She emphasizes that that this economic sector is, despite the terminology, "more like a web than a chain." Jennifer Bair, "Global Commodity Chains: Genealogy and Review," in *Frontiers of Commodity Chain Research*, ed. Jennifer Bair (Stanford: Stanford University Press, 2009), 11, 15.

[2] Kate Macdonald, *The Politics of Global Supply Chains: Power and Governance beyond the State* (Cambridge, UK: Polity Press, 2014), 3-5.

[3] See, for example, Alec Nove, *An Economic History of the USSR, 1917-1991*, 3rd ed. (New York: Penguin Books, 1992), 214-17; James R. Millar, *The ABCs of Soviet Socialism* (Urbana: University of Illinois Press, 1981), 26, 29; and Joseph S. Berliner, "The Contribution of the Soviet Archives," in *Behind the Facade of Stalin's Command Economy: Evidence from the Soviet State and Party Archives*, ed. Paul R. Gregory (Stanford: Hoover Institution Press, 2001), 1–10.

solicited or executed on the basis of ad hoc arrangements whereby cargo haulers exchanged their services for compensation from the recipient organization. Together, these commodity chain actors regularly chose to put supply and demand, and money as a means of exchange, ahead of concerns about ideological conformity with large-scale economic and nationalities policies.

This chapter joins a growing family of studies re-assessing Soviet economic life by focusing on how it operated. By engaging state agents, these newer works expand the range and type of actors, practices, and policies available for analysis. They also show that the Soviet economy was an influential factor of daily life alongside and inside, and not secondary to politics; it was characterized by definite causes for ubiquitous phenomena, such as commodity "shortages," that tend to be uncritically accepted as characteristic of Soviet socialism.[4] Elena Osokina, for example, demonstrates that the Stalin era was characterized by a "symbiosis" of planned economy and markets, without which neither enterprises nor individuals could have survived—a development to which both individuals and the state contributed.[5] Commodity chains are an aspect of Soviet economy that historians usually address only indirectly. The messy business of transporting goods—"reality," as Paul R. Gregory and Robert C. Stuart refer it —was rarely planned in detail by central officials, and was left for lower authorities and sector

[4] See, for example, articles in the "Stalinism and the Economy," ed. Andrew Sloin and Oscar Sanchez-Sibony, special forum, *Kritika: Explorations in Russian and Eurasian History* 15, no. 1 (Winter 2014): 7-124; Kristy Ironside, "Krushchev's Cash-and-Goods Lotteries and the Turn Toward Positive Incentives," *Soviet and Post-Soviet Review* 41, no. 3 (2014): 296-323; and Serguei Alex. Oushakine, "'Against the Cult of Things': On Soviet Productivism, Storage Economy, and Commodities with No Destination," *Russian Review* 73, no. 2 (April 2014): 202. For a typical understanding of shortages, see Paul R. Gregory and Robert C. Stuart, *Russian and Soviet Economic Performance and Structure*, 6th ed. (Reading: Addison-Wesley, 1998), 115, 127.

[5] Elena Osokina, "A Market in a Non-Market Economy" (paper presented at the annual meeting of the American Historical Association, New York, 5 January 2015); and Elena Osokina, *Za fasadom "Stalinskogo izobiliia": Raspredelenie i rynok v snabzhenii naseleniia v gody industrializatsii, 1927-1941* (Moscow: Rosspen, 1998). For Soviet-era western studies and understandings of what they call "mostly hidden" economic relationships, see, for example, Gregory Grossman and Vladimir G. Treml, eds., *The Second Economy in the USSR and Eastern Europe: A Bibliography*, Paper No. 1 of the Berkeley-Duke Occasional Papers on the Second Economy in the USSR (Durham: Duke University Department of Economics, September 1985).

enterprises to figure out.[6] Commodity chain actors who daily operated between source and destination mediated the pace and scale of economic growth (probably often unwittingly) in a way that central planners and recipient enterprises could not.

My approach makes their world of logistics and transportation a contingency of Soviet economic growth. Commodity chains of the early Stalin period were fragile and improvised, easily and frequently disrupted. My analysis of the materials exchange they conducted illustrates the complicated cross-sectoral and trans-regional integration of shipping operations. Tajikistan elites and lower cadres were together involved in intensively lobbying officials and agencies of all sorts, and in multiple other republics, to maximize the chances of needed supplies arriving. I evaluate the peculiarities and challenges facing the importation of two kinds of capital: timber and human labor. These cases demonstrate that, at least in Tajikistan, even top "central" authorities of the republican Council of People's Commissars (SNK) were involved in efforts to move such commodities. My evaluation of the interactions of agents across economic, political, social, and regional sectors illuminates operational understandings of the significance of capital flows in ways that more "traditional" emphasis on products, industries, or statistical inputs and outputs cannot possibly adduce.[7]

By focusing on tangible dynamics, this chapter furthermore contributes to *new materialisms* scholarship—including new economic history—that "testifies to a critical and nondogmatic reengagement with political economy, where the nature of, and relationship between, the material details of everyday life and broader geopolitical and socioeconomic

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[6] Gregory and Stuart, *Russian and Soviet Economic Performance*, 102-103.

[7] Raphael Kaplinsky, "Globalisation and Unequalisation: What Can Be Learned from Value Chain Analysis?" *Journal of Development Studies* 37, no. 2 (2000): 128-29.

structures is being explored afresh."[8] Most critical analyses of local-global relations within commodity chains emphasize how metropoles or agents of capitalist markets exploit peripheries of empires, typically, as Jonathan Curry-Machado notes, through capital extraction "in favour of the European and North American powers."[9] This reflects the fact that the broader literature on commodity chains sees the transportation of capital as a distinctly capitalist issue, tied to particular strategies of "competition" in the historical and contemporary advancement of markets and world-scale integration.[10] More nuanced works, however, address global markets to analyze the social construction of "interconnectedness" in transnational history.[11] Some postcolonial studies, for example, acknowledge that dynamic flows of capital, people, and ideas could be mutually constitutive of metropoles and peripheries.[12] This chapter proceeds with an examination of the endeavor to achieve this kind of profound physical connectedness, and finds that it both sustained and confounded the Soviet state in the Tajik SSR.

I analyze how commodity chains worked through documents produced by officials intimately involved in freightage, who had practical knowledge of ways that the economy functioned, and how commodities could be transported. Legal documents, reports, and correspondence about shipping reveal many of the relationships and dynamics that shaped the

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[8] Diana Coole and Samantha Frost, "Introducing the New Materialisms," introduction in *New Materialisms : Ontology, Agency, and Politics*, ed. Diana Coole and Samantha Frost (Durham: Duke University Press, 2010), 7. See also William H. Sewell, Jr., "A Strange Career: The Historical Study of Economic Life," *History and Theory* 49 (December 2010): 146–66.

[9] See Paul S. Ciccantell, David A. Smith, and Gay Seidman, eds., *Nature, Raw Materials, and Political Economy* (Amsterdam: Elsevier JAI, 2005); and Jonathan Curry-Machado, ed., *Global Histories, Imperial Commodities, Local Interactions* (New York: Palgrave Macmillan, 2013).

[10] See, for example, Gary Gereffi and Miguel Korzeniewicz, eds., *Commodity Chains and Global Capitalism* (Westport: Greenwood Press, 1994).

[11] See, for example, Kenneth Pomeranz, *The World That Trade Created: Society, Culture, and the World Economy, 1400 to the Present*, 3rd ed. (Armonk: M.E. Sharpe, 2013).

[12] See Gary Wilder, *The French Imperial State: Negritude and Colonial Humanism Between the Two World Wars* (Chicago: The University of Chicago Press, 2005).

contours of cargo transportation activities. Their inherent value is that they originate beyond the limits of scholarly approaches that focus on central control. Thus, while Gregory explains that "the five-year plans were a vision of the future with little or no operational significance," few scholars have attempted to engage the uncertainty that prevailed in daily activities of economy. I am able to account clearly for various participants, along with material and spatial factors that influenced the shipping operations and outcomes of southern Tajikistan in the early 1930s.[13] Importantly, many of my sources were produced by officials and institutions assigning or debating responsibility for actions related to freightage before, during, and after an expected shipping event occurred or was desired. While conversations about fault cannot themselves be taken at face value, engaging them on their own terms often reveals agents involved in activities, as well as the relationships, histories, and causes that lead to events and indeed a range of outcomes.

Such information demonstrates not only that acquiring supplies for major economic organizations of Tajikistan was complicated. It also did not fit with some common views of the organization of shipping based on certain cases of Russian organizations. Gregory claims that concerns about commodity chains of whatever form led most Soviet enterprises to avoid a high degree of specialization. “The chances of receiving materials and other inputs on a timely basis through official supply channels were favorable only if they were produced within your own organization… The more remote the supplier, such as in another glavk [chief administration] or even in another ministry the lower your chances.”[14] Such statements do not conform to the

[13] Gregory and Stuart, *Russian and Soviet Economic Performance and Structure*, 123; and Paul R. Gregory, *The Political Economy of Stalinism: Evidence from the Soviet Secret Archives* (Cambridge, U.K.; Cambridge University Press, 2004), 178.

[14] Gregory, *The Political Economy of Stalinism*, 178.

possibilities available to economic organizations based in Tajikistan, and they obscure the complexities facing agents across the USSR. I have found that in Tajikistan, higher governmental bodies were often concurrently critical of and sympathetic to the work brigades and laborers because of because of working conditions—perhaps especially so in the case of shipping agencies and personnel.[15] Enterprises in the many newly defined and settled economic regions of Russia also faced complex challenges to supplying and supporting their laborers with goods that had little to do with economic projects.

The chapter begins with a discussion the stakes involved in importing commodities to Tajikistan, and the dependency of economic enterprises on specialized shipping organizations. I proceed by examining how the need for foreign timber translated into complicated unplanned events for couriering it from Russia. I thereafter examine the manner in which timber and other commodities were distributed within the republic by shipping services meant to be centrally organized, but in reality characterized by dispersed authority and necessary illegal operations. Finally, I assess the impact of markets on imported labor, and how Soviet officials worked to reconcile this reality with official regulations.

[15] See, for example, Message addressed to Tadzhikmatlubot, copied to several organizations, attributed to the Stroimaterial trust of VSNKh of the Tajik SSR, signed by Kin'shakov (Office Manager) and Kostelei (Secretary), received 7 July 1930, Central State Archive of the Republic of Tajikistan (*Tsentral'nyi gosudarstvennyi arkhiv respubliki Tadzhikistan*; hereafter TsGART), f. 18 (Council of People's Commissars of the Tajik SSR, 1929-1939), op. 1, d. 193, l. 18 (full document); and "Resolution of the Construction Committee of the Sovnarkom of the Tajik SSR," no. 7, on 11 July 1930, in Stalinabad, copy with signatures attributed to Sluchak (Chairman of the Construction Committee of the SNK Tajik SSR) and Tomti (Secretary of the Construction Committee), TsGART, f. 18, op. 1, d. 193, ll. 42-44 (full document).

Moving like a state under construction

Officials across the USSR had seen commodity chains as critical to the survival of the state in southern Tajikistan since before the republic was created. This official view of governance as enacted by capital flows and investment resonated with a phenomenon that Stephen Kotkin refers to as "exchange" in the history of commerce and empire in Mongol and post-Mongol Eurasia and the USSR.[16] Kotkin observes that regimes of governance in the USSR manifested in the managed, multidirectional circulation of capital, although he exaggerates its simplicity under socialism as a centrally dominated, "standardized, prefab civilization."[17] In the Tajik SSR, the Soviet environmental management state required a steady flow of commodities with which to support physical change involved in economic growth projects. Because of this, freightage was one of the most significant activities of the republic in the 1920s and 1930s, and its improvement was crucial to establishing the presence of socialism.

As early as 1922, officials believed that they would ensure the security and institutionalization of the fledgling regime in southeastern Central Asia by improving what they referred to as trade networks for supplying local markets.[18] Throughout the 1920s, officials also viewed improvement of capital importation as a way to ward off international threats to the region's insecure borders. This concern was expressed particularly strongly following the NTD of Central Asia, when People's Commissariat for Trade (*Narkomtorg*) blamed foreign interests

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[16] Stephen Kotkin, "Mongol Commonwealth? Exchange and Governance Across the Post-Mongol Space," *Kritika: Explorations in Russian and Eurasian History* 8, no. 3 (Summer 2007): 487–531. See also, for example, Janet L. Abu-Lughod, *Before European Hegemony: The World System A.D. 1250-1350* (Oxford, UK: Oxford University Press, 1989), 153-84.

[17] Stephen Kotkin, "Mongol Commonwealth," 457-509, 520-22.

[18] Message addressed to the Central Committee of the Bukharan Communist Party and N. Khojaev (Chairman of the All-Bukharan Central Executive Committee), author not noted, copy translated to Russian (original language unknown), n.d., Russian State Archive of Social and Political History (*Rossiiskii gosudarstvennyi arkhiv sotsial'no-politicheskoi istorii*; hereafter RGASPI), f. 17 (Central Committee of the Communist Party of the USSR, 1898, 1903-1991), op. 86, d. 134, ll. 6b-7a (full document is ll. 6a-7b).

for its inability to establish "influence on all of Tajikistan's territory." Pre-existing economic relationships between East Bukhara and Afghanistan were strengthened during the collapse of Russian imperial and protectorate authority in Central Asia after the Bolshevik Revolution. Private cross-border commerce based largely in Afghanistan continued to impede the establishment of poorly supplied Soviet wholesale and retail enterprises through the 1920s.[19] Concerns rose because of the belief that much of this "pressure" was in fact the result of "Anglo-Indian" goods strategically sent to destabilize Soviet state building and security.[20] The flow of commodities across Tajikistan's southern border revealed the government's inability to manage territorial integrity or international relations. As Abdulqadir Mukhitdinnov explained in 1925, improving commodity flows to support the economy of southern Tajikistan was critical to retaining its independence from foreign influence, and the strengthening of Basmachi rebel fighting.[21]

Freightage, however, faced many of the same problems that other economic and other state activities did, such as lacking the necessary equipment, and labor. Shortages also exacerbated institutional difficulties with available human capital. Throughout the 1920s and 1930s, southern Tajikistan was the site of continuous in-migration that was meant to address apparent labor shortages. Settlers from other parts of the republic, Central Asia, and across the USSR encountered a Soviet world under construction that was unstable and ridden with anxiety

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[19] Report "On work completed in the first half of the 1926-27 [operating] year," attributed to Narkomtorg of the Tajik ASSR, n.d., RGASPI, f 62, op. 2, d. 869, ll. 7-8 (full document is ll. 7-19).

[20] Stenographic account of Mukhamediev's report, addressed to Comrade Mukhitdinnov (Chairman of Gosplan "of the Tajik Republic" [Tajik ASSR]), no. 566, June 1925, with signature attributed to Mukhamediev, TsGART, f. 19 (State Planning Committee of the Tajik ASSR, 1925-1929), op. 5, d. 1, ll. 89-94 (full document is ll. 78-110).

[21] Secret message from the Middle East Department to Comrade Krizhanovskii (of the Gosplan USSR Presidium), attributed to Karakhan, "regarding the dispensation of materials for activities in the border area of Tajikistan," 7 January 1926, copy sent to Comrade Mukhitdinnov (Chairman of the SNK Tajik SSR) on 12 January 1926, certified by illegible signature, TsGART, f. 17 (Council of People's Commissars of the Tajik ASSR, 1926-1929), op. 3, d. 19, l. 1a (full document is ll. 1a-b).

and suffering.[22] They faced gross and basic insecurities: of food and housing, due to commodity chain inefficiencies; and of employment and wages, due to challenges associated with ongoing administrative reorganization and state development. As a result, many of these migrants—sometimes thousands—regularly departed from the republic only months after arriving.[23] The apparent lack of planning for shipments or corresponding projects underway was a top concern of officials. The republic's State Committee for Construction, *Tadzhikgosstroi*, for example, pointed to the irony that the new homes it built were little comfort to residents because of the absence of stocked bazars, stores, or even simple kiosks.[24] In some rural regions, shipping was so ineffective that road construction teams traveled themselves to "supply points" just to check the availability of food.[25] Commodity chains were so utterly dysfunctional following Tajikistan's independence that even freightage workers were not provided sufficient sustenance. Because of this, as I will show, internal audits warned that officials often felt powerless to discipline laborers on the job since so many were delinquent on account of behaviors meant to help them survive.[26]

This was a problem shared across economic divisions as a result of the scale of the early five-year plans. It was a period of significant structural (and social) transformation across the USSR, when shortages were extreme and ubiquitous. The reason for this, according to scholarly consensus, is that the Soviet economy was one of "inherent shortages." The concept seeks to

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[22] See, for example, Botakoz Kassymbekova, "Helpless Imperialists: European State Workers in Soviet Central Asia in the 1920s and 1930s," *Central Asian Survey* 30, no. 1 (March 2011): 21-37.

[23] Maya Karin Peterson, "Technologies of Rule: Empire, Water, and the Modernization of Central Asia, 1867-1941" (PhD diss., Harvard University, 2011), 443-44.

[24] Message from the Tadzhikgosstroi construction trust to Tadzhikmatlubot, copied to SNK Tajik SSR, signed by Borodin (Deputy Manager of the Trust) and Dashevskii (Business Manager), 22 May 1930, TsGART, f. 18, op. 1, d. 193, l. 13 (full document).

[25] Message addressed to the SNK of the Tajik SSR, no. 1464, attributed to Ogorodnikov and Baranov of "Aziakhleb," 25 November 1929, TsGART, f. 18, op.1, d. 102, l. 46 (full document).

[26] Message addressed to *Tadzhikmatlubot* and the Construction Committee of the SNK of the Tajik SSR, attributed to Ivanovskii and Sergeev (Secretary) of the *Stroimaterial* trust, 28 June 1930, TsGART, f. 18, op. 1, d. 193, l. 14 (full document).

capture the fact that despite impediments posed by shortages and other disorder, ambitious projects in new settlements nevertheless went forward. The term *inherent shortage*, however, misrepresents what it describes, which is that enterprise officials never knew for certain that they would obtain the materials assigned to them by central planners, for a range of reasons. A good manager, then, was one who anticipated shortages and prevented disruptions to work by ensuring that expected or needed capital was acquired.[27] This idea is based on scholarly views of the Soviet economy of the post-WWII period, which were themselves based on studies of socialist Hungary.[28]

This conception of economic operations has applicability to Tajikistan on the eve of its independence. As the example of Stalinabad demonstrated, however, unorthodox freightage relationships of the republic were the result of absolute regional shortages of various kinds. No place demonstrated Tajikistan's ambition and need for imported raw materials of state building more than its capital city. In the fall of 1929, SNK Chairman Abdukadir Khodjibaev described the anticipated physical environment that would elevate Stalinabad to its status as the seat of republican power. It would include a theater, a park for relaxation (reprieve for laborers from the heat and the dust), a building to house labor unions, a telephone system, and many other amenities.[29] Khodjibaev was, however, aware that the desire to make Stalinabad a "cultural center" was attached to considerable practical implications. Before theaters and parks, he explained, the state should construct "a building for the government" to replace the indigenous 'wattle and daub' structures currently used. Furthermore, accessible, clean drinking water, and

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[27] Gregory and Stuart, *Russian and Soviet Economic Performance*, 127.

[28] See, Janos Kornai, *Economics of Shortage* (Amsterdam: North-Holland Publishing Company, 1980).

[29] Report on construction in Stalinabad, attributed to Abdurahim Khojibaev (Chairman of the SNK of the Tajik SSR), December 1929, TsGART, f. 18, op. 1, d. 101 (t. 1), ll. 156a-157b (full document).

new lodgings were needed for growing numbers of officials and laborers. Other infrastructure could help overcome poor mobility, characterized by the accumulation of dirt and dust, by the low quality of roads and canals, as well as by the absence of sidewalks, bridges, and lighting on the streets of the new city.[30] Outside Stalinabad, the center of activity in Tajikistan, the challenges to planners were even greater.

The state construction agency, Tadzhikgosstroi, faced the great task of coordinating the erection of buildings and most other structures while entirely dependent on other organizations for acquiring the capital with which to do so. Because of this, time-sensitive construction involved improvisation and temporary fixes. In the fall of 1929, the agency's workload was greatest in Dushanbe. The highest priority work was the construction of housing for government offices, and lodging for the large numbers of immigrating cadres and laborers. When timber was lacking—as it usually was—alternative materials were used. The floors of administrative buildings were made from cement instead of wood, while those of lodgings were left as soil.[31] Migrating personnel frequently traveled through Dushanbe before deploying elsewhere, so lodging was seen as a critical good for managing the influx. Since these were short-term visitors, however, the quality of their homes was expendable.[32] In other cases, shortcuts were avoided. The planned construction of an army building in Dushanbe, for example, was delayed because of a lack of timber and nails.[33] In the past, some basic materials like timber had been gathered locally, within the republic. Now, however, Tadzhikgosstroi alleged that it was considering a

[30] At the time, drinking water was transported from the Dushanbe River to the center of the city by water carriers, 1-2 versts distance, driving up its cost. TsGART, f. 18, op. 1, d. 101 (t. 1), ll. 156a-157b.

[31] "Summary Report on Construction in the Tajikistan ASSR, by Construction Agency, in October 1929," TsGART, f. 18, op 1, d. 101 (t. 1), l. 54 (full document is ll. 53-60).

[32] TsGART, f. 18, op. 1, d. 101 (t. 1), ll. 53-60.

[33] TsGART, f. 18, op. 1, d. 101 (t. 1), ll. 57-58.

stoppage to the continued extraction of native sand, rock, and gravel, in addition to timber, since the overall cost of doing so had risen to be too much higher than imports.[34]

Economies and "natural treasures": Importing timber to Soviet Tajikistan

Tajikistan imported timber from Russia, despite the distance and the many complications it entailed. Wood was one of the most important kinds of feedstock in Soviet economic growth. It was "a raw material basic to construction, communications, and mining," as well as a source of fuel. But while the USSR had more timber than any country—half of the global stock—Tajikistan was uniquely lacking in it.[35] Experts agreed that importing wood was more economical, and more ethical, than harvesting locally sourced wood.[36] That exigency meant depending on a vast, and complicated, trans-Union network of suppliers and shipping agents located as far away as the so-called central regions of Russia.[37] This meant that Tajikistan's timber providers were often too far away for republic representatives to influence them in a way that would ensure timely and satisfactory deliveries. But acquiring Russian wood was an undeniable necessity: officials across the USSR were convinced that they lacked the knowledge,

[34] TsGART, f. 18, op. 1, d. 101 (t. 1), l. 56.

[35] Russia and "European" regions had far more trees (or stock) than most of the Caucasus and Central Asia. See W. David Bowles, "The Logging Industry—A Backward Branch of the Soviet Economy," *American Slavic and East European Review* 17, no. 4 (December 1958): 426, 429-30; and Walter Donald Bowles, "Economics of the Soviet Logging Industry," (PhD diss., Columbia University, 1958), 1, 283, 362-363; and E. A. Rees, ed., *Decision-Making in the Stalinist Command Economy, 1932-37* (New York: St. Martin's Press, 1997), 124.

[36] "Explanatory note on the logging estimates researched in the valleys of the Ak-Suki and Shurob-Dar'i Rivers, and in the navigable gorges, riverheads, and tributaries near the cities of Kulob and Kyzyl-Mazar," signed by Tiulin (Afforestation Inspector of the Forest Adminstration), n.d., TsGART, f. 18, op. 1, d. 94, ll. 34a-b (full document is ll. 34a-35a).

[37] These included the Moscow, Vladimir, Ivanov Iaroslav, Kostroma, Riazan, Tula, Kirov, Gork'ii, Kalinin, Velikoluksk, Briansk, Kaluga, Smolensk, and Central Black-Earth oblasts, as well as the Mari, Chuvash, and Mordvinian ASSRs. See Bowles, "Economics of the Soviet Logging Industry," 374.

infrastructure, and above all natural resources to efficiently and sustainably exploit wood products in the new republic.

As usual, these material challenges were understood in bureaucratic terms. Forestry experts believed that one reason why insufficient lumber was sourced in the republic was that their profession had not had enough time and resources to catalogue, administer, and thereby develop and protect woodlots. Modern forest management as a practice was very new to the lands of Tajikistan. Only in northern regions that were colonized in the period of tsarist Russian occupation of Central Asia had it been practiced somewhat systematically. Two forestry areas (*lesnichestva*), in Panjakent and Uroteppa, had employed a total of seventeen foresters (*lesnoi strazh*). Not until 1927 were forest management organizations organized in Dushanbe and Qurghonteppa, and then in Kulob and Garm in 1928. By 1929-30, a total of seven such sub-agencies existed in the republic, along with some auxiliary workgroups, altogether employing sixty-three people.[38] These personnel and their leaders were hesitant and uncertain about how to manage logging because of the widespread view that they still had incomplete knowledge of traditional local harvesting practices, regional tree types, age, and location, as well as of how to manage and replant them—a situation that was likely not uncommon throughout southeastern Central Asia. One official estimated that forty percent of designated woodlots were as yet "totally unstudied."[39]

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[38] Report titled, "Reorganization of Tajikistan's forestry," signed by A. A. Madisson-Dubrovskii (Director of Forests Administration), n.d., TsGART, f. 18, op. 1, d. 94, l. 95 (full document is ll. 95-114).

[39] TsGART, f. 18, op. 1, d. 94, ll. 34a, 96, 110-114. On the state of Soviet knowledge of forest lands in Central Asia, see, for example, Jake Fleming, "Political Ecology and the Geography of Science: Lesosady, Lysenkoism, and Soviet Science in Kyrgyzstan's Walnut-Fruit Forest," *Annals of the Association of American Geographers* 104, no. 6 (2014): 1–16.

The desire to acquire more information about forests prior to extensive logging was partly informed by an ideologically charged conflict among timber resource experts under Stalin. In Tajikistan, as elsewhere in the USSR, logging policy was informed by two contradictory impulses: the first, a longstanding preservationist and conservationist current with roots in imperial Russia and, the second, a zero-sum drive to exploit natural resources to the benefit of industrialization. The start of the first five-year plan was exceptional as a period when the government, intent on rapid economic change, gave preference to the latter and virtually unlimited forest exploitation over moderation. These policies were most relevant in Russia, where the vast majority of Soviet logging took place.[40]

What may have seemed in Moscow and Russia to be decisive changes to practice in 1929-1931 were interpreted with greater hesitation in Tajikistan. The forestry experts of the Central Asian republic were evidently opponents of unbridled exploitation, concerned that unmediated logging would be foolhardy and destructive.[41] The forested areas they managed were small. These comprised thickets and brush interspersed with nut or fruit and other types of trees, and lacking the kind of lumber needed in basic construction. They did not, for example, contain the kind of tall, strong trees that were most appropriate for use as telegraph and telephone poles.[42] Experts argued that some of these areas should be altogether avoided and preserved. They claimed that many of these woodlands were "undoubtedly 'natural treasures'" that, because

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[40] Stephen Brain, *Song of the Forest: Russian Forestry and Stalinist Environmentalism, 1905-1953* (Pittsburgh: University of Pittsburgh Press, 2011), 96-117.

[41] Their distance from the halls of Soviet power may have also made them less able to interpret cues of the center as identified in some scholarship.

[42] Message addressed to SNK (copied to several sectoral organizations), attributed to the Post and Telegraph Office of Dushanbe, signed by Konnov (Director of the Office of Communications) and Lipinskii (Director of the Technical Section), 27 June 1930, TsGART, f. 18, op. 1, d. 182, ll. 79a-b (full document); and Report titled "Findings of the Forests Administration regarding the transfer of forestry [administration] from Narkomzem to VSNKh," signed by Madisson-Dubrovskii (Director of Forests Administration), and attributed to Redlikh (Director of the Department of Forestry), n.d., TsGART, f. 18, op. 1, d. 94, l. 163 (full document).

of their remoteness and lack of contact with humans, ought to be protected. According to the Afforestation Inspector of the Department of Forestry of the republic, remote forested areas should have been established "as national parks of the Tajik SSR [to serve] the needs of science with…incalculable value of a high order for all the peoples of the USSR." Evidently taken with the perceived opportunity to prevent logging, he expanded his assessment to promote local forested areas as locations for the development of "tourism in order to provide the republic and its population no small material benefit [profit]." Only after exploring these potentials should the state, "as much as possible extract wood from these regions."[43]

The Afforestation Inspector also appealed to more purely financial concerns to do with the logistical challenges of harvesting what wood was available in the republic. The forested areas of Tajikistan were scattered among the mountains, often in remote regions, where logging and transportation could be accomplished only inefficiently and slowly.[44] Kulob's construction projects could not, for example, depend on locally sourced wood in 1929-30. The Afforestation Inspector explained that difficult or non-existent pack animal trails and unaccommodating river ways from neighboring forested regions made timber extraction almost impossible and incalculably expensive. "It is important to note the current condition of mountain trails—that is, their absolute absence. Forest resources are richest where the roads are poor or non-existent, or in very distant populated places on the upper reaches of rivers and streams." He concluded it was financially inadvisable to engineer these routes until woodlot management was established.[45]

[43] TsGART, f. 18, op. 1, d. 94, l. 34b.
[44] TsGART, f. 18, op. 1, d. 94, l. 163.
[45] TsGART, f. 18, op. 1, d. 94, l. 34a.

The Inspector was likely aware that central planners considered logistics a key aspect of logging policy and profitability. These criteria were key measures implicated in forestry management reorganization projects underway across the USSR. Other Tajikistan officials addressed this explicitly, concluding that the conditions that make "European parts of the Union" suited to economical logging and timber transportation did not exist in "eastern Central Asia."[46] Since the Revolution, Soviet logging policy had increasingly favored focused cutting along established transportation routes. Logging was concentrated in central and southern regions of Russia that were closer to populated centers and roads—a practice that continued until after the Stalin period.[47]

In roadless Tajikistan, timber production could not compete for reasons related to the legacy of both infrastructure and administration. Statistical data showed that the value of forest protection there was "extraordinarily low" compared to other republics. Where its profitability per hectare had been only 18 kopeks (k) in Tajikistan in 1927-28, other non-Russian republics were already reporting the following values during 1925-26: 6 rubles (r) and 34 k in Ukraine, 7r 33k in Belarus, 53k in the Caucasus, 77 k in Turkmenistan, and 25k in Uzbekistan.[48] Understanding what these figures meant, exactly, is difficult, though scholars agree that financial measures provide one avenue for assessing the Soviet economy.[49] Experts in Tajikistan hypothesized that the absence of institutional legacy also contributed to its conditions. So, their

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[46] Message "on the issue of transferring management of forest stock of the BSSR, UkrSSR, [illegible], TurkSSR, UzSSR, and Tajik SSR from the Narkomzem to the VSNKh of these republics," addressed to the Permanent Representation of the Tajik SSR "for transmission to the Council of Labor and Defense," attributed to the Supreme Council of the National Economy [VSNKh], copy certified by attribution to the Secretary of Gosplan Tajik SSR TsGART, April 1930, f. 18, op. 1, d. 94, l. 156 (full document); and TsGART, f. 18, op. 1, d. 94, 163.

[47] As a result, however, many of these regions took decades to recover, while northern forestlands were not touched. See Bowles, "The Logging Industry," 429-30.

[48] TsGART, f. 18, op. 1, d. 94, l. 100.

[49] Gregory and Stuart, *Russian and Soviet Economic Performance*, 115.

request that less be demanded of local timber included the argument that regional logging would become profitable, manageable, and sustainable only if it was reorganized by combining operational models of the Uzbek SSR and the RSFSR.[50]

The case for importing timber to Tajikistan gained possibly decisive leverage from the fact that it also protected the coexistence of various kinds of settled communities, as demographics changed and populations grew rapidly through migration. Southern regions relied heavily on imported timber to alleviate the great strain that accompanied the increasing demands of resettlement that were involved in ambitious economic growth projects. When growing populations of new settlers retrieved wood from surrounding regions, they threatened the livelihoods and even survival of pre-existing and remote settlements, where highlanders used it for basic construction and heating. One 1930 report warned that "supplying the construction of Kulob at their [highlanders'] expense could only lead to the kind of undesirable hollowing out of village orchards that happened in the outskirts of Dushanbe/Stalinabad, also as a result of the high cost and high demand for timber. Cities must be supplied [instead] with imported timber."[51] Importing wood would also decrease pressure on the Department of Forestry. Its director, A. A. Madisson-Bubrovskii, complained that he could police only 18 percent of Tajikistan's forests.[52] He claimed that woodlands were being "hacked and destroyed in great quantity" because too little imported timber and firewood was reaching settlers and construction projects.[53]

The alternative of importing timber to Tajikistan was no easy feat. As with other forms of capital, transporting wood from far away involved tremendous levels of coordination of

[50] TsGART, f. 18, op. 1, d. 94, ll. 110-114.
[51] Capital named here as in original. TsGART, f. 18, op. 1, d. 94, l. 34b.
[52] TsGART, f. 18, op. 1, d. 94, ll. 95-96.
[53] TsGART, f. 18, op. 1, d. 94, l. 97-98.

bureaucratic, material, and human resources. These complicated logistical arrangements reflected the challenges of shipping in general on the scale of the Soviet Union. As I demonstrate below, however, the process by which enterprises acquired wood for Tajikistan often included significant activities outside the plan. Moreover, they involved transportation across spaces much larger than that of commodities assigned to more other regions. While capital accumulated through this process, all of the factors involved—amounts of timber to be procured, the sources of wood, the agencies and personnel involved, as well as the means of shipping—were constantly changing, and usually becoming more numerous. The resulting uncertainty promoted continued anxiety about how to acquire goods.

Tracing how timber was acquired through official channels is difficult, in part because names of agencies and scales of responsibility changed rapidly during the 1920s and 1930s, in most economic sectors. Unlike other capital stock, timber procurement and shipping was less often coupled with that of other goods. Agencies and entire "syndicates" took parts of their names from "*les'*," the Russian word for timber, and were mandated with making wood available across the USSR, usually moving it from central regions of the RSFSR to other republics. In 1929-30, central planners empowered an agency called Lesosnabsbyt' with most timber procurement. This was a subsidiary organization of Logistics Management and Distribution (Snabsbyt'), a centrally organized agency responsible for managing and conducting the provision of most major commodities for all Soviet regions. Snabsbyt' coordinated activities with regional subsidiaries such as Tadzhiksnabsbyt', usually on the basis of "direct agreements" with destination enterprises like Tadzhikgosstroi.

Snabsbyt' claimed that only an "insignificant" amount of timber was sourced through other forms of contract. Scholars have, however, shown that at times up to half of the timber

available in the USSR may have been logged by small, informal groups of agricultural workers and forced labor.[54] Of course, untangling exactly what that means is difficult since the same scholars have also explained that its labor was highly subsidized.[55]

Official documents do, however, show that the logistics of the timber industry—and not official plans and regulations—were often the source of Tajikistan's timber shortages. Production does not appear to have been a significant problem. From 1930-1949, tree cutting was free-of-cost to logging enterprises. Felling organizations were not obligated to pay stumpage fees that the state later imposed to incentivize diversification of source locations. As highly subsidized agencies to boot, their work was profitable and productive. Though logging did not receive anywhere near the capital investment of other heavy industries in the USSR, its productivity increased by three times between 1928 and 1940, mainly thanks to the growth of the available labor pool and expansion into new logging regions.[56]

Still, Tajikistan and many other regions never received the amount of timber that they claimed to need because timber transport depended on shifting and insecure relationships among coordinating agencies. Even though Tajikistan was allotted timber by central plans in 1930, shipping enterprises were bound by rules and conventions of priority that limited the distribution of all forms of products. In the case of timber from Snabsbyt, for example, republics had only "fourth priority" as potential recipients. First priority belonged to the railroads agencies, so that they could use the wood for any potential infrastructure needs. Second priority belonged to the

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[54] TsGART, f. 18, op. 1, d. 689, ll. 2-3; Bowles, "Economics of the Soviet Logging Industry," 6-7; and Rees, *Decision-Making*, 125-33.

[55] Bowles, "Economics of the Soviet Logging Industry," 343-44.

[56] Bowles, "Economics of the Soviet Logging Industry," 348-349; and Dominique Moran, "Lesniki and Leskhozy: Life and Work in Russia's Northern Forests," *Environment and History* 10, no. 1 (February 2004): 90-91.

military. The third level favored flagship and shock-work projects of "union significance," such as the Magnitogorsk iron and steel complex of the Ural Mountains in Russia.[57]

The reliability of the timber supply was further undermined by the fact that the main, official source for Tajikistan's wood changed on the eve of the first five-year plan. Until then, the primary source for Central Asia and Kazakhstan was the central regions of Russia.[58] This started to change in 1927, when the SNK of the RSFSR began to gradually shift their supply base to "western Siberia" in order to "compensate for the [previous] export of timber from central regions of the USSR (central Volga, Bashkiria, Ural)." Planners reasoned that these former source regions ("especially the Urals") would then have more access to their own wood, while concurrently becoming the main suppliers of timber to "southern regions of European Russia and part of Ukraine." Several regions of western Siberia, such as the upper Ob River region, Suzunsk, and Povallikhinsk, were seen as geographically endowed with great wood resources that could become timber bases for all of Siberia, Central Asia and Kazakhstan.[59] Although the transfer was meant to streamline and simplify stresses on provision networks, supply fulfillment for Kazakhstan and Central Asia worsened as the responsibility shifted to Siberia. The effect on the dependent regions, according to a forestry expert's report, was that "funds provided for

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[57] "Explanatory note," signed by Lapin (Director of Snabsbyt') and Ianovskii (Director of the Department of Planning and Finance [within Snabsbyt']), 28 July 1933, TsGART, f. 18, op. 1, d. 689, ll. 2-3 (full document is ll. 2-5), introduced by cover note no. 2923, addressed to Mikushgu (SNK), signed by Lapin and Ianovskii, TsGART, f. 18, op. 1, d. 689, l. 1.

[58] "Central regions of Russia" is well-defined in Bowles dissertation, but maybe incorrect based on the period and because (consciously) prefers some American alterations.

[59] Report "on the issue of the present state and prospects for supplying Central Asia and Kazakhstan with timber from western Siberia," attributed to Solntsev ("Director of the SredazEkoso brigade"; Member of its Presidium) and Golovin (Brigade Member), and certified by [illegible], 4 March 1934, TsGART, f. 18, op. 1, d. 878, ll. 6-8 (full document is ll. 2-29), introduced by cover note no. 4/b30403, and addressed to Comrade Rakhimbaev (Chairman of SNK Tajik SSR), signed by Solntsev (Member of the SredazEkoso Presidium), TsGART, f. 18, op. 1, d. 878, l. 1.

construction went unused, construction [projects] dragged on, became more expensive, and capital investments froze."[60]

The lack of timber apparently strained daily economic life of Tajikistan as state building accelerated in 1929. Stressed enterprises, under pressure to perform, responded by altering plans and practices, and sometimes through uncooperative behavior. Tadzhikgosstroi faced an inconsistent supply of poplar wood from a state timber supplier, Leszag, and it could not afford apparently expensive "private" shipments. It opted to make-do with pine—which was cheaper and more readily available—in tasks where poplar was conventionally or technically preferred.[61] Organizations also resorted to legal and illegal competition over available timber. In November, Tadzhdortrans persuaded the Tajikistan SNK to give it 3,000 cubic meters of wood belonging to the railroad. The appeal explained that a late timber shipment was delaying priority construction of bridges at the Dushanbe and Iliak Rivers in the capital city region. The executive body's approval was not, however, enough to prevent the railroad agency's protest by "withholding wagons" that Leszag needed to transport the timber to the construction locations.[62]

These conditions only deteriorated as the supply base for Tajikistan shifted to western Siberia. Forestry experts complained that logging trusts had not worked efficiently and productively enough to move timber, and implied that the work they did complete was for their own regions's benefit. Siberian trusts were ensuring that Siberian delivery quotas were fulfilled,

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[60] TsGART, f. 18, op. 1, d. 878, ll. 4, 14-15.

[61] TsGART, f. 18, op. 1, d. 101 (t. 1), l. 56.

[62] Message addressed to the SNK Tajik SSR, no. 2785, signed by Semenov (Director of Tadzhdortrans) and Vostrov (Director of the Roads Section [of Tadzhdortrans]), 20 November 1929, TsGART, f. 18, op. 1, d. 102, l. 40 (full document); Message addressed to Leszag (extremely urgent), attributed to Nikiforov (Managing Director of the TsIK of the SNK Tajik SSR) and Abramenko (Secretary), 23 November 1929, TsGART, f. 18, op. 1, d. 102, l. 43 (full document); and Message addressed to SNK, in response to Message no. 1555 of 23 November 1929, signed by the Director and Clerk of Leszag [both illegible], 27 November 1929, TsGART, f. 18, op. 1, d. 102, l. 48 (full document).

but satisfied less than half of that devoted to Tajikistan and the rest of Central Asia. Of that which was exported, Siberian trusts had not lumbered the required percentage, meaning most of what arrived in Tajikistan and elsewhere was unprocessed, round timber. According to the experts, such circumstances persisted to 1934, with no sign they would change. “Central Asia sits without wood, completing what construction it can, [while] a huge amount of cut timber lies in [western Siberian] logging areas.”[63]

During the 1930s, enterprises attempted to overcome wood shortages by circumventing centrally planned procurement and shipping. Tajikistan deployed illegal envoys to seek out timber instead of waiting for it. Several subsidiary shipping and transportation agencies sent delegations to the RSFSR to seek and secure shipments. The practice was part of a common phenomenon across the USSR where production managers of the 1930s faced with lacking or delayed supplies deployed “expediters” (*tolkachi*) to acquire owed or needed capital. In doing so, managers initiated a range of activities that were inherently illegal because they were outside of central plans. Such errands were also financially risky because "good *tolkachi* are costly; our manager has to pay their salaries, travel expenses, and living expenses, and give them incentives to outcompete the *tolkachi* of dozens of other desperate enterprises."[64] Tajikistan’s expeditions were part of a broader Central Asian practice involving a variety of organizations. At least as late as 1938, "representatives of collective farms in Central Asia (especially in the cotton-growing regions)" were deployed to Russia in search of timber.[65]

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[63] Western Siberia secured for itself 98.3 percent of planned round timber, and 87.8 percent of projected industrially processed timber. Central Asia received only 31.8 percent of the former, and 8.4 percent of the latter. TsGART, f. 18, op. 1, d. 878, ll. 6-7.

[64] Eugenia Belova, “Economic Crime and Punishment,” in *Behind the Facade of Stalin’s Command Economy: Evidence from the Soviet State and Party Archives*, ed. Paul R. Gregory (Stanford: Hoover Institution Press, 2001), 133-40.

[65] Bowles, “Economics of the Soviet Logging Industry,” 300-301.

The Russian destinations of Tajikistan's tolkachi were carefully chosen to maximize the likelihood that they would succeed in obtaining capital. They often started expeditions without knowing where they would find timber, so they based their hunts in the well-established economic regions central Russia, where infrastructure and industrial legacy were abundant. Bowles, without the benefit of archival sources, states that the phenomenon of Central Asian delegations to Russia was part of a broader constellation of "irrational" events within the centrally planned economy. Seeing that timber-producing regions sometimes imported wood, or that Siberian products moved west to plentiful central regions, he muses that "perhaps the most plausible explanation for such cases is that a timber consumer, even in a timber-reproducing region may, at times, be unable to purchase in that region; hence, he is forced to obtain timber from any possible source."[66] Bowles also notes that the sourcing and destinations of timber cargo were often dependent on what forms and units of means of transportation were available.[67] This agrees more with my assessment of these 1930s expeditions. As the main source of Central Asian supplies shifted to Siberia, where the physical and administrative infrastructure was less well-established than in central regions of the RSFSR, logistical problems increased. In the middle of the decade, timber traveled to Tajikistan by way of the Omsk and Tomsk railroads of Siberia, southwards to the Turksib and Central Asian railroad. The two northern lines had far worse records when it came to organization, including moving sufficient wagonloads and the turnover of empty wagons. Central Asian officials were concerned with improving these processes since uninterrupted timber travel on the Tomsk and Omsk routes took about 100 and

[66] Bowles, "Economics of the Soviet Logging Industry," 300-301.

[67] W. Donald Bowles, "Cost-Price Relationships and the Location of Soviet Industry: A Case Study," *International Economic Review* 9, no. 3 (October 1968): 285.

110 days, respectively. Avoiding delays was critical because "the main sources of timber supply to Central Asia are situated in regions of the Omsk [rail]road."[68]

To avoid the complicated context of Siberian economic growth, Tajikistan's unplanned timber-seeking expeditions were concentrated in central regions of Russia because its better developed economic infrastructure was more conducive to various scales of improvisation—or, what some call "irregularity." When, for example, the officers of a Tadzhiksnabsbyt' trust inspected timber stocks at the Batraki railway station, southeast of Moscow, on 7 December 1932, they enacted a series of relationships needing complicated, time-sensitive, evolving coordination with many local, regional, and union-level agencies. Here, their decision to purchase "frozen timber on rafts" from a Volga River shipping agency called Volzhtranslesosplav demanded considerable unplanned travel and personal risk because they lacked centrally mandated arrangements with local organizations. The very preparation of the wood for rail shipment required a mammoth logistical effort. It included traveling among far-flung central Russian cities—including Batraki, Samara, Ulianovsk, and Syrzan'—between December and February, to contract labor, food, and equipment. For this reason, the purchase agreement for timber signed in Samara on 11 January of 1933 included the promise of six tons of barley. In anticipation of the significant labor involved in unhinging pieces of wood that were frozen together, the manager himself explained that, "without food [khleb], it would be impossible to commence such work."[69] But since the cereal promised was not available at the

[68] TsGART, f. 18, op. 1, d. 878, l. 8.

[69] Report "On the salvaging of frozen timber on the Volga River with Caravan nos. 1, 29, and 54, close to the Batraki Station of the Central Volga Region," addressed to to the SNK and Snabsbyt' of the Tajik SSR and others, sent from the Batraki Station to the RKI of the Central Volga Region in Samara, signed by Sadov (Representative of TadzhikSnabsbyt'), 4 February 1933, TsGART, f. 18, op. 1, d. 501, l. 137a (full document is ll. 137a-138a).

Batraki station, the trust manager traveled to Ulianovsk, where he obtained obtain 4 tons of flour and 2 tons of millet, and also commenced the recruitment of workers.

Expeditions like this one were desperate measures, demonstrating that timber was valued at great financial and human cost to the Soviet state in Tajikistan. This was also in itself a massive physical exercise whose material dimensions illustrated its scale. In anticipation of the backbreaking work involved with preparing tons of frozen timber for railroad transportation in the middle of the Russian winter, Tajikistan's envoys also purchased critical equipment, including 50 steel heavers, 100 steel crowbars, 250 steel ice picks, 100 meters of hemp rope, 20 nets, 500 leather gloves, 100 leather boots, 15 short fur coats, 50 steel shovels, 200 wooden shovels, and 150 hooks. The Tadzhiksnabsbyt' delegation had not, however, traveled in large enough numbers to perform the kind of operation involved here. So it recruited many local laborers. By the end of January, it had organized three cooperative work groups, and delivered them to the worksite as "Caravan No. 54," along with food provisions, equipment, and some horses. Two other caravans were organized (numbers 29 and 1) in early February, one of which consisted of kolkhoz laborers provided by the city soviet of Syzran'. The manager reported that "73 unmounted people and 15 horses are at work on ice-breaking and hauling timber six kilometers to the railroad," predicting it would be completed by the end of February. "They are hauling from flood zones to a non-hazardous area where they are piling the logs to a volume of four thousand cubic meters."[70]

Envoys in Russia also contended with implementing improvised logistics within the centrally planned transportation system. Extending Tajikistan's authority across the USSR to ensure that shipments reached the republic rapidly and intact was a complicated endeavor that

[70] TsGART, f. 18, op. 1, d. 501, ll. 137a-138a.

faced the task of navigating new relationships with far-away administrations and chartering the temporary use of infrastructure. In 1933, the republican subsidiary of the Union for Transportation Cooperation (Soiuz Transportnoi Kooperatsii; hereafter *Soiuztrans*) found that it was handicapped in part by the "absolute lack of garages, warehouses…on the [Union-wide] Soiuztrans system," which caused many attendant challenges to the resources that were available. In January, it hired a "special agent" to courier a shipment of 1,500 cubic meters of round timber that had been purchased in central Russia on credit. Though this payment also apparently covered the cost of railroad tariffs, the agent communicated that shipping was held up indefinitely because of a lack of empty wagons and platforms on the Moscow-Kazan Railroad. Soiuztrans of Tajikistan requested that the republican SNK help it obtain storage sheds—thirty-five and twenty-five respectively at the Batraki and Alatyr' stations—to accommodate the wood in transit.[71]

Such continuous challenges in the transportation of capital designated for Central Asia across Russia tend to be seen as a common Soviet problem. With reason, scholarship on the economics of Stalinism has characterized planning as a façade constructed by administrators who assumed that chaos would ensue in the rush to satisfy goals as much as possible. Moscow's monitoring agencies frequently complained that bad records usually were related to poor scheduling at regional and transregional levels, and also made it hard to assess and improve for future organization. Complaints like this could not encompass the kinds of timber-seeking activities I have discussed above. Central authorities' persistent complaints and frustration about

[71] Message addressed to SNK Tajik SSR in Stalinabad, no. 35, attributed to the Tajik Regional Office of Soiuztrans, handwritten, signature and attributive stamp illegible, 11 January 1933, TsGART, f. 18, op. 1, d. 501, l. 76a; and Fact sheet attributed to the Tajik Regional Office of Soiuztrans, handwritten, signature and attributive stamp illegible, 31 January 1933, TsGART, f. 18, op. 1, d. 501, l. 76b.

insufficient records and planning in the regions and economic sectors show the limits of Soviet power beyond Moscow and local party organs. Moscow's inability to significantly alter or influence the way that the Gosplans of Central Asian republics and other organizations managed their relationships as "clients of transportation" reflected that the state was a very cumbersome machine, still under construction.[72]

This also shows the degree to which a focus on the views of Moscow and central republican authorities promotes misleading interpretations of Soviet experiences as being homogenous. Doing so ignores the simple fact that upper-level Central Asian and central Union officials were spatially removed from, and thereby often less able to influence, the front- and back-ends of the administration and delivery of their promised supplies. When in March of 1930, for example, an RKI USSR official observed that no Central Asian republic's representative "has any information or knowledge about the quantity of shipments arriving in Central Asia and its republics," the criticism was immediately qualified by the commodity chain context.[73] The report suggested that these difficulties were related to trans-Soviet logistical problems as far away as the Perm Railroad. It explained that there the "Timber Syndicate" had no plan in place to ensure that stations between Ufa and Kazakhstan and Central Asia were prepared to handle an expected nine-hundred wagons of timber. It furthermore anticipated failures in basic organizational

[72] Resolution, signed by Lavrov (Chairman of the Central Asian Committee on Freightage) and Bukin (Secretary), 16 February 1930, TsGART, f. 146 (Permanent Representation of the Tajik SSR to the Central Asian Economic Council in Tashkent, October 1929-January 1935), op. 1, d. 78, ll. 144-145 (full document is ll. 141-45).

[73] Record of proceedings of the 17 March 1930 meeting held by RKI of the USSR "on the issue of the importation of agricultural machines, fertilizer, cereals, timber, cement, etc., to Central Asia," attended by organizations including SoiuzLes, NKPS, Permanent Representations of Kazakhstan, Turkmenistan, Kyrgyzstan, and the Tajik SSR [Uz SSR not listed], TsGART, f. 146, op. 1, d. 78, l. 115a, enclosed by cover letter addressed to the Narkomtorg of the Tajik SSR (Stalinabad) and the Permanent Representation of the Tajik SSR in Tashkent, attributed to from the Permanent Representation of the Tajik SSR, signed by Propisnov (Executive Secretary of the Permanent Representation of the Tajik SSR), 1 April 1930, TsGART, f. 146, op. 1, d. 78, l. 115b.

matters such as clearly identifying loads slated for irrigation works in Kazakhstan so that they were ready for expedient offloading en route.[74]

Ad hoc cooperation among agencies and regions across these vast spaces only exacerbated already poor bureaucratic practices related to Central Asia. There, more than elsewhere in the USSR, administrative and logistical relationships between agencies were as yet being worked out during the 1930s, at local, intra-, and inter-republican levels. They had difficulty working together because of inefficient nascent administrations of their own. In the early 1930s, the monthly meetings of the Central Asian Regional Transportation Commission in Tashkent were often inconclusive because too many republican agencies failed to attend. Those of Tajikistan were particularly delinquent in this respect.[75]

All of the Central Asian republics had difficulty engaging central Soviet institutions because of their inability to cooperate well as a geographic bloc. Moscow frequently interfered in regional affairs to try to improve these dynamics, but often with opaque motives and results. In May of 1930, STO USSR announced it would take over the task of preparing and managing transportation related to Central Asia, starting in the fall—a task that was presently managed by SredazEkoso. It intended to reform the system of supply by planning shipments according to product groups, and by republic.[76] By January of 1931, however, timber importation and distribution duties for Central Asia (with a few exceptions) returned to SredazEkoso.[77] Thus,

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[74] TsGART, f. 146, op. 1, d. 78, l. 115b.

[75] See, for example, Message addressed to Narkomtorg Tajik SSR (Stalinabad), attributed to Gofman (Deputy to the Permanent Representative of the Tajik SSR) and Kolobov (Secretary), 1 April 1930, TsGART, f. 146, op. 1, d. 78, l. 116 (full document).

[76] Proceedings of the interdepartmental meeting held by Gosplan of the Tajik SSR, in Stalinabad, 27 May 1930, TsGART, f. 146, op. 1, d. 78, l. 4a (full document is ll. 4a-b).

[77] In fact, STO was clearly not in charge when the economic union took over timber shipping. The duties were transferred from taking it over from Lesprom of the RSFSR. Message addressed to the SNK USSR, secret copy no. 734a, signed by Iakovlev (Lesprom USSR Management), 2 February 1931, State Archive of the Russian Federation (*Gosudarstvennyi arkhiv rossiiskoi federatsii*; hereafter GARF), f. 5446 (Council of People's Commissars of the

inside of a year, this organization was forced to re-establish its relationship with a host of other agencies, including the Narkomtorgs of Kazakhstan and the Central Asian republics, the USSR, as well as with the "the Timber syndicate."[78]

The inefficient nature of Soviet transportation exacerbated its inherent discrimination against Central Asia—home of the poorest republics—because they were the farthest away from sources of critical capital such as woodlands. These contiguous republics often then created problems for one another or bickered over the sharing of resources and logistics. In 1930, for example, there was much anxiety about usage and management of the Turksib Railroad, which was to eventually become the primary shipping artery for capital between Russia, Kazakhstan, Central Asia, and the rest of the USSR.[79] High-level Kazakh functionaries, such as Turar Rysqulov, sometimes leveraged control of the line in disputes with Siberia about degrees of responsibility for supply to Central Asia. In practical terms, however, all three regions frequently jockeyed for a share of railroad usage and traffic, usually through interdepartmental and interregional conglomerates, with ultimate mediating authority reserved to Moscow authorities, especially Gosplan USSR.[80]

The fundamental bureaucratic challenge facing all of these organizations was provision, coordination, and sharing of physical resources. Wagons, locomotives, and the personnel who

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USSR and Council of Ministers of the USSR, 1923-1991), op. 12a, d. 1036, l. 4 (full document); and Internal report (secret) addressed to Comrade Rudzutak (Deputy Chairman of SNK USSR (Moscow), attributed to the Chairman of SredazEkoso, 24 January 1931, GARF, f. 5446, op. 12a, d. 1036, l. 6 (full document).

[78] The Central Asian Regional Committee's [CAZ RK] tentative plan for road freightage for the 3rd and 4th quarters of 1929-30 beyond April [of 1930], 6 March (1930), TsGART, f. 146, op. 1, d. 78, l. 139 (full document is ll. 138-140).

[79] TsGART, f. 18, op. 1, d. 878, ll. 2-3.

[80] Message "on the issue of coordinating the economic plans of regions gravitation to the Turksib," from STO USSR and Gosplan USSR, sent to Gosplan Tajik SSR, copy attributed to Kviring (Deputy to the Chairman of Gosplan USSR) and Loganov (Executive in Charge), 11 July 1930, TsGART, f. 18, op. 1, d. 93, l. 343 (full document).

could operate them were always lacking in Central Asia at a degree greater than elsewhere in the USSR. Locomotives were particularly valuable because they drove the trains, and there was never enough of them to meet demand. The Turksib Railroad administration of 1930 did not have permanent staff qualified to maintain the locomotives. So when engines and other specialized parts malfunctioned, such other railroads as the Omsk supplied the mechanics. It could take up to two weeks for help to arrive, and then from five to ten more days to complete repairs.[81] Whereas the mobile means of shipping involved careful coordination across vast spaces, the infrastructure they depended on was just as much of a technical concern. In the early 1930s, the Turksib, and especially its southern reaches, was stressed beyond capacity because of central planners increasing demands of its lines. The Semipalatinsk junction's expected traffic of 350 wagons per day was limited to 150. But junctions across the line could not be enlarged until other basic facilities were improved to accommodate existing traffic. The Turksib's stations needed more space for unloading and storage, better water supply and enlarged locomotive parks.[82]

If the trans-Soviet logistic networks used to supply Tajikistan were thoroughly flawed, those within the republic were still worse. In 1929, shipping was so disorganized and under-planned that it often took place in ways that the state was unaware of until after the fact. As with transportation problems elsewhere, economic and Party agencies based in Stalinabad, Tashkent, and across the USSR, tended to understand these as an administrative challenge. The Regional Transportation Commission of Central Asia, for example, judged that the difficulties of transportation in Tajikistan in 1930 were exacerbated by poor planning, interdepartmental

[81] TsGART, f. 18, op. 1, d. 689, ll. 2-3; and TsGART, f. 18, op. 1, d. 878, ll. 21-25.
[82] TsGART, f. 146, op. 1, d. 78, l. 139; and TsGART, f. 18, op. 1, d. 878, ll. 8, 21-25.

communication, and record keeping. "Currently, there is no inventory of forthcoming internal shipping by cartage." The commission called on Tajikistan's governing bodies to "strictly regulate transportation," and to seek ways of systematizing and planning "immanent" traffic to regions and projects that were under development.[83]

As usual, the language of bureaucracy obscured (and surely was often uninformed by) the dire physical conditions resulting from the disorganization of commodity chains within Tajikistan. The poor planning for immanent, and recent, imports in the summer of 1930 resulted in a colossal mess of wood and other cargo that wasted away on the grounds of the capital city. Arriving shipments overflowed beyond the unloading areas of the Stalinabad railway station, piled on a sloping path that was two kilometers long. Officials could not monitor the timber, or protect it from theft and rot. They increasingly worried about fire as wood continued to arrive into the height of summer. The Narkomtorg USSR was outraged by the apparent wastefulness, and threatened to embargo the republic by offloading other shipments in Tashkent.[84] SredazEkoso recommended that the SNK of Tajikistan alleviate the situation by hiring "an energetic and competent person, who should be entrusted with the command of means of transport and a labor force."[85] This cheery suggestion, although well-intentioned, did not account for the comprehensive nature of shipping problems in Tajikistan in 1930.

Once timber was procured and delivered, no reliable system of freightage existed yet for moving it from the capital to other regions that needed it, even though timber was seen as critical

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[83] Extract from the record of proceedings of the meeting no. 8 of the Central Asian regional committee on shipping operations, 5-6 March 1930, TsGART, f. 146, op. 1, d. 78, l. 125a (full document is ll. 125a-126a).

[84] Message addressed to SNK Tajik SSR, no. 387, signed by Gal'pershtein (Deputy to the Chairman of SredazEkoso), 25 June 1930, TsGART, f. 18, op. 1, d. 182, l. 92 (full document).

[85] TsGART, f. 18, op. 1, d. 182, l. 92.

to the realization of most economic growth projects.[86] The problem was compounded by the fact that the very infrastructure needed to support such networks was substandard or non-existent, and whose construction often required timber and other imported resources itself. For example, the existing road from the capital to Kulob, with its rough, ungraded surface, twisted and turned so sharply (often on mountain cliffs) that hauling most types of cargo was difficult. Moving larger objects was almost impossible. Until a new road was constructed, it would be particularly challenging to transport long, heavy logs of the sort used as support poles for telephone and telegraph lines. In fact, imported poles were seen as the key to establishing permanent communication with Stalinabad in the summer of 1930. Those used until then were made of unsuitable and "old" wood that did not behave as line operators desired. They allegedly caused wires to break, and many fell or washed away with seasonal waters.[87] Improving infrastructure depended on the importation of adequate timber, regardless of the challenges to mobility and the high cost.

The extraordinary efforts and improvisation that characterized the acquisition of foreign timber for Tajikistan were a daily reality of commodity chains within the republic, and they are the subject of the next section of this chapter. In the case of this particular shipping challenge, Soiuztrans agreed to attempt to haul new poles for the telegraph line from Stalinabad to Kulob. The organization may have taken the job to move timber on the road to Kulob because no other agency was in place to do so, or because none was willing. In Tajikistan, the negotiations and uncertainties that characterized and interfered with Soviet freightage were particularly acute. If the work of the tolkachi was illegal, then the more or less unplanned daily operations of

[86] Brief report "on the progress of work in minor construction," attributed to Meerson (Director of the Group for Minor Construction), n. d. (1930), TsGART, f. 18, op. 1, d. 101 (t. 1), l. 454 (full document).
[87] TsGART, f. 18, op. 1, d. 182, l. 79.

Tajikistan's hauling agencies of the early 1930s were entirely outside the law by their very nature. Moreover, where the underplanned character of supply flows across the USSR were symptomatic of the weakness of the state there, the chaotic way they worked in Tajikistan reflected an even greater degree of disorganization, material instability, and diffusion of power. Soiuztrans surely took on the job of hauling timber on the road to Kulob because it was after all its job to do so. But it only accepted the contract on the condition that it first receive forty additional carts for the job.[88]

Shipping, officially: A distinct sector of the economy in Tajikistan

At the start of the 1930s, most of the land-based shipping within southern Tajikistan was conducted by small groups of laborers who primarily used animals to move cargo between settlements and worksites. These agents used horses, camels, and donkeys to carry goods or pull vehicles loaded with them. Increasingly, they used trucks, too, as greater numbers were imported and roads became more drivable, though automotive vehicles remained rather uncommon until later in the decade. I focus on people who worked in land-based (non-railway) shipping in Tajikistan's southern regions. Their job, in short, was to pick up all sorts of cargo from one point and move it to another. These so-called *transportniki* delivered commodities available within the republic to enterprises needing materials for construction or production of some sort. The vast majority of these shipping agents were laborers between the ages of nineteen and forty. They were involved in varied tasks, including loading and unloading and transportation, and sometimes in basic administration. Most of them were illiterate, and very few were members of

[88] TsGART, f. 18, op. 1, d. 182, l. 79.

the Communist Party. Their nationality, as I discuss later, differed by workgroup; importantly, many freightage agents were of foreign origin. Many of these men (according to the data, they were mainly men) lived, and sometimes traveled, with their families, which usually included three to six members.[89]

Transportniki were organized mainly in cooperative workgroups called "artels." This term referred to diverse forms of "voluntary labor collectives" with roots in the Russian empire. Starting in the late 1920s, the Soviet state began dissolving them, because their operations contradicted Soviet principles of governance and modernization. These groups generally operated outside the control and influence of labor unions and industrial management, preferred non-mechanized activity, and worked for collective wages. The artel disappeared as a type of organization across most of the USSR in the 1930s.[90] In southern Tajikistan, however, shipping artels continued serving economic growth until at least the later part of that decade. They took orders and jobs from various parties—central administrators in Stalinabad, as well as lower-level managers and foremen of freightage and economic enterprises—and operated with a fair degree of independence.

The artels of southern Tajikistan were unaffected by attempts to reform commodity chains in 1930. At the height of the first five-year plan, the Soviet administration conducted vast restructuring efforts across the USSR. During the spring, the details of the massive institutional

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[89] "Promkooptrans commissioner's report on the Qurghonteppa Region," February 1931, TsGART, f. 93 (Producer's Transportation Cooperative Union of the Tajik SSR), op. 1, d. 64, ll. 89-95 (full document); Lists of "Promkooptrans office workers and laborers," April and May 1931, TsGART, f. 93, op. 1, d. 96, ll. 264-71, 275 (full document); and Lists of "Employees of Promkooptrans Tajikistan as of September 1931," TsGART, f. 93, op. 1, d. 96, ll. 349-52 (full document).

[90] Hiroaki Kuromiya, "Workers' Artels and Soviet Production Relations," in *Russia in the Era of NEP: Explorations in Soviet Society and Culture*, ed. Sheila Fitzpatrick, Alexander Rabinowitch, and Richard Stites (Bloomington: Indiana University Press, 1991), 72-80.

and legal reorganization of the shipping sector in the new republic signaled the ambitions and challenges facing the state there. As I show, it was an effort to control the relationships involved in commodity mobility to harness their potential contribution to economic productivity. Upper-level officials revised regulations defining the hierarchy of authority and responsibility of shipping agents. They believed this would allow them to gather information about how transportation resources and commodities were used and by whom, in order to allow them to improve future planning and coordination of inter-sectoral operations. They furthermore attempted to make it easier to collect such information by concentrating the means of transportation in Tajikistan among its shipping agencies. The terms of this reorganization reflected an effort on the part of the republic to streamline and reinvigorate the hierarchies governing commodity mobility that served economic growth within its borders, at a time when significant changes to transportation administration were taking place across the USSR.[91]

Gosplan of Tajikistan held an interagency meeting on 4 February 1930, where participants decided the reorganization and scheduled its implementation to take place over the course of the year. The gathering resolved to establish an organization called the Union for Transportation Cooperation (Soiuztrans), which would begin operations in April. By the fall, this republican subsidiary of Soiuztrans USSR would be responsible for managing and supervising all shipping within Tajikistan's borders, including subordinate firms and even individual artels.[92]

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[91] On the reorganization of the People's Commissariat for Ways of Communication, see J. N. Westwood, *A History of Russian Railways* (London: G. Allen and Unwin, 1964), 250.

[92] Record of proceedings of the interdepartmental meeting held by the State Planning Committee (Gosplan) of the Tajik SSR, 4 February 1930, TsGART, f. 93, op. 1, d. 23, ll. 31-32 (full document is 31a-32b). For several views of efforts to control mobility within imperial Russia and the USSR, see introduction and part 1, "Governing Mobility," in *Russia in Motion: Cultures of Mobility since 1850*, ed. John Randolph and Eugene M. Avrutin (Urbana: University of Illinois Press, 2012).

This was an explicit effort to improve the governance of freightage, which was commonly viewed as ineffective. Until this point, the republican Narkomtorg had managed shipping within Tajikistan. The institution had been, and remained, responsible for mediating the commodity needs of enterprises and communicating them to agencies that delivered cargo. It received requests for goods from economic organizations, evaluated them, and then passed them on to the appropriate supplier. (Direct requests were not officially allowed.) The responsibility Narkomtorg would now hand over to Soiuztrans—overseeing the logistics of commodity distribution within the entire republic—had been within its purview since 1928. The February 1930 meeting removed this responsibility as an open indictment of incompetence. Allegedly, Narkomtorg had failed to investigate and rectify shipping problems or facilitate the work of hauling agents through establishment of, and support to, storage bases and stopping points on transportation routes.[93]

Soiuztrans's adoption of Narkomtorg's logistical responsibilities effectively made shipping a distinct economic sector within the republic. Specifically, Soiuztrans would manage and supervise two subordinate agencies, the Tajik Automotive Transport Joint Stock Association (*Tadzhikskoe avto-transportnoe aktsionernoe obshchestvo*; hereafter *Tadzhavtotrans*) and the Producer's Transportation Cooperative Union (*Promyslovo-transportnyi kooperativnyi soiuz*; hereafter *Promkooptrans*), facilitating cooperation between them by acting as a dispatcher and providing storage facilities such as warehouses.[94] Any other freight hauling organizations were to

[93] TsGART, f. 93, op. 1, d. 23, ll. 31-32. See examples of such allegations at: Message addressed to the SNK of the Tajik SSR, no. 1464, attributed to Ogorodnikov and Baranov of "Aziakhleb," 25 November 1929, TsGART, f. 18, op. 1, d. 102, l. 46; and Message addressed to the SNK Tajik SSR, no. 3791, attributed to Ogorodnikov and Tomashevich of "Aziakhleb," 30 November 1929, TsGART, f. 18, op. 1, d. 102, l. 49.

[94] Record of proceedings "of the interdepartmental meeting held by Gosplan Tajik SSR, 27 May 1930, in Stalinabad, TsGART, f. 146 (Permanent Representation of the Tajik SSR to the Central Asian Economic Council—or SredazEkoso—in Tashkent, October 1929-January 1935), op. 1, d. 78, l. 4b (full document is ll. 4a-b).

be officially disbanded.[95] These specialized shipping agencies acquired duties through agreements with so-called economic organizations that managed activities in construction, agriculture, or industry. Soiuztrans also presided over the formulation and enforcement of shipping in these relationships, charged with ensuring they were handled effectively. Now that shipping was a distinct jurisdiction, the cargo transportation agencies exclusively had the duty to execute import and export activities within the republic, as well as enterprise-level needs (such as transportation of cargo at worksites).[96]

The broader goal of reforming the shipping sector in this way was to improve how it served planning and implementation in the wider economy. To that end, Soiuztrans was now responsible for collecting, managing, and creating information about shipping. Knowledge of trends and rates of implementation of projects provided the critical data for the formulation of the shorter-term agendas within the five-year plan. Gosplan USSR encouraged agencies everywhere to improve their records of shipping at this time: amounts, origins, junctions, and destinations, as well as means of transportation, duration of trips, costs incurred, etc. During the period of transition to Soiuztrans's authority over Tajikistan's logistics, information management reform was a key concern to higher administrators because Soviet planning was often little more than making adjustments based on achievement of previous targets.[97] In June 1930, a Tajikistan commodity chain official complained that the "lack [of] a clear count of means of transportation, of the development of trucking, of the state of freightage" to individual points as well as on the scale of the republic made anticipating and addressing inefficiencies of supply very difficult. Nor

[95] See, for example, TsGART, f. 93, op. 1, d. 23, l. 31.

[96] Record of proceedings "of an interdepartmental meeting held by Narkomtorg Tajik SSR," on 25 June 1930, TsGART, f. 18, op. 1, d. 182, l. 23.

[97] Gregory and Stuart, *Russian and Soviet Economic Performance*, 103, 115.

did they have a sense of the degree to which organizations were failing to report on shipping. "Without these [data] it is not possible to assemble a plan that even approximates reality."[98]

The reforms in shipping were intended to enable effective information management and freightage by the three empowered agencies by giving them sole authority over all means of transportation within the republic. Gosplan officials assigned each cargo hauling organization jurisdictional priority over certain resources. Tadzhavtotrans became the primary operator and manager of the entire automotive vehicle fleet of the republic.[99] Soiuztrans was to have sole authority over "donkey cooperatives," and it shared management of horse-drawn wagons and carts, and "camel cooperatives," with Promkooptrans.[100] Each one's jurisdiction was accompanied by their right and duty to appropriate all of the means of transportation from other entities. An official system of priority had existed in Tajikistan since September 1929 which had obligated any available carts and carting labor in the republic to serve the Soviet government.[101] This so-called *trudguzhpovinnost'* recalled older forms of transportation coordination that had been used in the former Russian empire.[102] In the later sources analyzed here, "obligation" (*povinnost'*) was not invoked as a justification for acquisition of transport means or services. Rather, the language emphasized jurisdiction over tools of mobility.[103] Now, other euphemisms served state ambitions. Upper-level officials encouraged Tajikistan's governing bodies to

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[98] TsGART, f. 18, op. 1, d. 182, l. 23.

[99] Until then, TGDT had been the primary operator and manager of automotive vehicles (since November of 1928). TsGART, f. 146, op. 1, d. 78, l. 4b.

[100] TsGART, f. 146, op. 1, d. 78, l. 4b.

[101] Extract from the record of proceedings of the meeting no. 8 of the Central Asian regional committee on shipping operations, 5-6 March 1930, TsGART, f. 146, op. 1, d. 78, l. 125.

[102] See, for example, John W. Randolph, "The Singing Coachman or, The Road and Russia's Ethnographic Invention in Early Modern Times," *Journal of Early Modern History* 11, nos. 1-2 (Winter 2007): 33-61.

[103] M. A. Beznin and T. M. Dimoni argue that forms of obligation were interwoven with markets that sustained the kolkhoz economy of the 1930s. See "Protsess kapitalizatsii v rossiiskom sel'skom khoziaistve 1930-1980-kh godov," *Otechestvennaia istoriia*, no. 6 (2005): 114.

"energetically enact measures to actively recruit all those owning means of transportation."[104] It was a way of acknowledging that shortages of all forms of movement inside the republic would exacerbate the pressures of economic planning and distribution on the republic's uniquely challenging terrain. In the summer of 1930, for example, Gosplan Tajikistan officials knew that their estimated needs in transportation for the coming operating year of 1930-31—an additional 1,230 automotive vehicles, 5,840 wagons, 6,900 camels, and 6,350 donkeys—could never be met by imports. Accordingly, their agency resolved to initiate "cooperativization" of the means of mobility, "in the interest of being economical."[105]

This was part of a comprehensive effort across the USSR to consolidate authority among and between economic sectors, pressuring all levels of society.[106] During the first five-year plan and part of the second, Gosplan started to take over the economic planning functions of VSNKh, the leading Soviet economic planning body of the 1920s, as the Soviet state became more centralized.[107] The preceding era of the 1920s New Economic Policy (NEP) had been characterized by a significant degree of independence among enterprises. "They combined into trusts and marketed their output through syndicates, only loosely controlled by planners."[108] Starting in 1928, however, they were gradually reclaimed by ministerial and regional authorities. In the meantime, the former operational freedoms fo the economy became officially subject to the central plan, which ordered what to produce, and to whom to deliver, and at what prices. In

[104] TsGART, f. 146, op. 1, d. 78, l. 125.

[105] Message addressed to the Central Asian regional committee on shipping operations in Tashkent, attributed to Lebedinskii (Chairman) and Sigai (Secretary) of Gosplan Tajik SSR, 3 June 1930, TsGART, f. 146, op. 1, d. 78, l. 41 (full document); and SNK of the Tajik SSR report titled "On freight turnover and requirements in means of transportation for 1930-31," TsGART, f. 146, op. 1, d. 78, l. 42 (full document).

[106] Nove, *Economic History of the USSR*, 214-17.

[107] Gregory and Stuart, *Russian and Soviet Economic Performance and Structure*, 76.

[108] Gregory, *The Political Economy of Stalinism,* 127.

Tajikistan's reality, however, efforts to amalgamate the resources and governance of mobility under shipping agencies constituted an inelegant ongoing, inelegant process. It was no simple reshuffling of bureaucratic duties and rights enabled by the transfer of capital to transportniki. The republic's three freightage companies were responsible for actively taking these assets from organizations or individuals. The hauling firms were effectively assimilating others' now former jurisdictions. These complicated administrative and material processes were usually quite cumbersome because they involved incorporating transportation duties and property that economic organizations managed.

For this reason, Promkooptrans often encountered reluctant cooperation from such entities. When it implemented the acquisition of the Transport, Land, and Construction Organization's (Transzemstroi) shipping operations during the summer of 1930, it requested that officers "agree [to comply with the terms] in a way that has positive meaning for us." Promkooptrans evidently expected resistance to its rather invasive requests for the transfer of "agency-level" and wider transportation duties and effects. It demanded the transfer of property related to transportation, most notably wagons and horses. The shipping cooperative also demanded "advances [of funds] sufficient to cover the current contract between us" that took into account "the capital you have lost."[109] Handing over means of shipping and related information could have exposed vulnerabilities or problems that would threaten the positions of personnel within Transzemstroi and other economic organizations. Non-cooperation could have been a way to avoid or forestall discovery of deficiencies, or to protect interests related to enterprise

[109] Message addressed to Transzemstroi, attributed to Kosachev (Operations), Shchegolevatykh, and Denichenko (both Executive Committee), 1930, TsGART, f. 93, op. 1, d. 20, l. 2 (full document).

jurisdiction over transportation. Organizations and persons likely had a variety of independent stakes in retaining control of their ability to manage resources and move their own commodities.

Economic life in Tajikistan did not easily lend itself to upper-level officials' desire to make shipping an efficient and distinct sector. Inside a commodity chain, moving goods involved complex relationships among many actors. The daily reality was very different from pronouncements on systemic change. As I will demonstrate, however, official and unofficial aspects of freightage were in fact flexible enough to accommodate many challenges to establishing a new economic life in the republic's southern regions.

Everyday shipping

The everyday operations of shipping in southern Tajikistan embodied Soviet experiences that did not fit neatly into categories of strong state effectiveness and oppression or social participation and resistance. In the spirit of scholarship on "everyday life," this section addresses some of the ways that mid- and lower-level administrators and laborers coped with their conditions through practice. *Everyday shipping* refers to how agencies and agents managed the duties and challenges in cargo transportation that they faced on a daily basis. It is a way of addressing their lives as state actors who performed their work by navigating institutional relationships and negotiating legal contexts but also in the pursuit of food, shelter, and personal stability. And while the quotidian is associated with the ordinary and minute, Jeff Sahadeo and Russell Zanca point out that "everyday life actually is not so routine, but something that we constantly re-make and reorganize as we go through various phases in our lives." It can be "so unfamiliar, frequently

seeming not to make very much sense."[110] I will show how agencies and agents involved in shipping conducted their affairs to fulfill certain duties of their employment while shirking others according to the limits and needs of economic life in southern Tajikistan of the early 1930s. From the perspective of everyday shipping, the Soviet state appears different from the familiar historiographical portrayal of a centralizing administration that demanded great efforts from its subjects on unreasonable terms. Instead, we see a prudent government that managed its endeavors with a view to accomplishing priority tasks in ways that were viable, even if not aligned with wider policy.

The Soviet state in southern Tajikistan acknowledged and accommodated the considerable material limitations facing the people who served it. Various upper-level officials expressed concern about work conditions. At the start of 1931, a republican Gosplan committee concluded that the "discrepancy" between the three responsible agencies' expected and real shipping performance was caused by a lack of support supplies and services, as well as of a suitable built environment. They needed more saddles, bridles, bulk fodder for animals, work clothes for laborers, tools, food supply, mechanics, and spare parts for automotive vehicles. Furthermore, these firms could not "guarantee 100% coverage for shipping in the period of spring planting campaigns, namely January, February, March, and April" due to the poor condition of the means of mobility and of the infrastructure. Transportniki could only "theoretically use the automobile transport on hand" since most of it was in need of repair, and

[110] Jeff Sahadeo and Russell Zanca, "Central Asia and Everyday Life," introduction in *Everyday Life in Central Asia, Past and Present*, ed. Jeff Sahadeo and Russell Zanca (Bloomington: Indiana University Press, 2007), 2-3. See also Sheila Fitzpatrick, *Everyday Stalinism: Ordinary Life in Extraordinary Times; Soviet Russia in the 1930s* (Oxford, UK: Oxford University Press, 1999), 1-4.

because rains expected in the spring would cause road conditions that only pack animals could navigate.[111]

In this complicated material context, upper-level officials could plainly see that their economic formulas would be distorted indefinitely, regardless of any data collected about shipping. The matter of the unforeseeable and unintended within the plan also puzzled western commentators of the Soviet era.[112] How could central administrations make large-scale agendas involving multiple entities that surely had equipment, materials, and labor of widely differing quantity and quality, all of which could encounter a range of challenges during plan execution? The state did so by operating in a manner that accommodated or encouraged various forms of unplanned activity in shipping in order to maximize the completion of tasks. On the larger scale of Tajikistan's southern regions, sometimes the solution promoted for contending with challenging roads and paths was simply to attempt to increase the overall number of available working animals and unmechanized and machine vehicles, as well as people moving the cargo.[113] As I will demonstrate below, however, the official terms that accompanied the reorganization of freight hauling, defined in various kinds of documents, acknowledged that agencies and agents needed the capacity to improvise in everyday shipping. The actual language that defined the new hierarchy of agencies allowed upper-level officials to operate as if they had

[111] Record of proceedings no. 4 of the 17 January 1931meeting of the Transport and Connections Section of the Gosplan Tajik SSR, in Stalinabad, TsGART, f. 93, op. 1, d. 18, l. 17.

[112] See, for example, Martin L. Weitzman, "Material Balances under Uncertainty," *Quarterly Journal of Economics* 85, no. 2 (May 1975): 262-82.

[113] See TsGART, f. 146, op. 1, d. 78, l. 125; and Record of proceedings of a 3 March 1930 interdepartmental meeting held by the "Representative of Narkomtorg USSR in Central Asia," TsGART, f. 146, op. 1, d. 78, l. 135 (full document is ll. 135-137).

control of activities in the name of socialism in southern regions of the republic while de facto sanctioning practices that would be considered illegal.[114]

The reorganization of shipping taking place in southern Tajikistan granted license to necessarily unpredictable daily practices. The republican Gosplan and its subsidiary organizations prescribed rules for commodity chain cooperation that may have been purposely vague. In fact, the May 1930 meeting in which they defined the roles of the three shipping agencies resolved that the actual work of shipping was to be conducted according to "conventional agreements." These were route-specific arrangements of freightage agencies with each other, or with economic organizations, about the routes and means of transportation, as well as cargo amounts and tariffs. Although the nature of these agreements was not specified in the record of this meeting, it is clear that they could not have been very specific because of the manner in which actual shipping was organized. The gathering's proceedings included a resolution stating that the three shipping agencies would enter into conventional agreements to "generally decide: the distribution of received cargos" for shipment; acquired forms of transportation and fodder; "the distribution of routes and roads among transportation organizations"; issues related to tariffs; and "the standard plan of contracts for cargo transportation." According to this record, Soiuztrans retained ultimate authority for forming delivery contracts with economic organizations.

This client relationship was not defined in a manner that necessarily dictated the organization of shipping. The artels operating under the three shipping firms were expected to cooperate in the accomplishment of duties and also to share animals, wagons, and automotive

[114] On horizontal dealings of the 1930s that were, "by definition, illegal because they were outside of the plan/law," see Gregory, *Political Economy of Stalinism*, 146-48.

vehicles.[115] Flexible, unique agreements were used because they were perceived as an easier way to get things done on behalf of the state. Paul Gregory has explained that activity outside the plan was a norm of relations between enterprises, and especially in cargo hauling, on the basis of "fragile preliminary agreements that could be changed at any time."[116] But he does not account for why that is, or the impact it had on daily business. I argue that such arrangements inherently dispersed authority among organizations and actors well beyond any center.

The sanctioning of conventional agreements, furthermore, made it hard to ensure accountability for work in an already complicated, evolving commodity chain. The economy was characterized by a division of labor that perpetuated ambiguous conditions and persistent problems that were hard to resolve. While the three aforementioned shipping agencies hauled goods, the availability of cargo for transportation depended on other organizations. Narkomtorg managed most supply to larger settlements, while the Tajikistan Consumer Cooperative, Tajik Matlubot served many work and construction zones in the early 1930s. The complicated overlapping responsibilities could be confusing to supervising officials. They often were at a loss for where to start identifying operational problems. In 1930, Narkomtorg's reported investigation of insufficient material and food supply to construction of the Kulob and Samarkand roads found no clear culprit: "Neither Aziakhleb nor Tadzhikmatlubot could respond with comprehensive data to our inquiry about the missing flour supply for the workers of the Kulob and Samarkand roads." Narkomtorg closed the issue by requesting that the two organizations report more frequently and give greater attention to accountability in such matters.[117]

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[115] See TsGART, f. 146, op. 1, d. 78, l. 4b.

[116] Gregory, *The Political Economy of Stalinism*, 199.

[117] Report addressed to the construction committee of the SNK of the Tajik SSR and copied to others, attributed to Shevtsov (Deputy [Chairman] of Narkomtorg Tajik SSR) and Kuz'min (Director of the Department of Manufactured Goods), 11 June 1930, TsGART, f. 18, op. 1, d. 193, ll. 19-20 (full document). See also Message

This picture is different from that which studies have found in other contemporary Soviet settings. Some argue that accepted violations of work norms and poor recordkeeping were sorts of silent agreement between planning bodies and enterprises. Such conventions would have allowed executive bodies and individuals to avoid responsibility for inevitably failing to meet productivity targets, while they facilitated the privacy lower-level agencies needed in order to engage in illegal acts.[118] In southern Tajikistan, activities that differed from overarching Soviet policy were sanctioned by legal documents defining shipping operations. The result was a convenient, if confusing, situation where illegal activities were in some ways legal, distorted lines of responsibility, and interfered with problem-solving. When problems were addressed, authorities were often concurrently critical of shipping labor and sympathetic to its working conditions. From this perspective, one factor challenging deliveries was the incompleteness of the larger program of economic growth in southern Tajikistan.

A dispute from 1930 exemplifies the paradigm of global responsibility and how it bred a unique culture of explanation related to freightage. During the fall, Promkooptrans held interdepartmental hearings to resolve tensions between its artels and the state construction organization, Tadzhikgosstroi. The two sector outfits had officially had a dedicated freightage agreement since July.[119] The Promkooptrans executive officers, and even leaders of its

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addressed to the Construction Committee of the SNK Tajik SSR, attributed to Kin'shakov and Kostelei (Secretary of the Stroimaterial trust), 7 June 1930, TsGART, f. 18, op. 1, d. 193, l. 8 (full document); and Resolution No. 7 of the Construction Committee of the SNK of the Tajik SSR "On supplying foodstuffs to workers engaged in civil and road construction," 11 July 1930, signed by Sluchak (Committee Chair) and Tomti (Committee Secretary), TsGART, f. 18, op. 1, d. 193, ll. 42-44 (full document).

[118] See Gregory, *The Political Economy of Stalinism*, 145-82.

[119] Message addressed to Tadzhikgosstroi, copy no. 491, attributed to Shchegolevatykh (Member of the Executive of Promkooptrans) and Kosachev (Operations Department of Promkooptrans), 16 August 1930, TsGART, f. 93, op. 1, d. 14, l. 24a (full document); and "Proceedings of the meeting for the delineation of common accounts between Soiuztrans, Tadzhikgosstroi, and transport artels," 6 July 1930, TsGART, f. 18, op. 1, d. 182, l. 273a (full document is ll. 273a-b).

cooperative workgroups, were sympathetic to the construction organization's allegation that shipping agents frequently invented complaints against Tadzhikgosstroi in order to avoid punishment for losses incurred as a result of their own mistakes in transportation. There was sufficiently good evidence, for example, to suspect that one artel's employees invented a problem to cover up the loss of goods and cash during a river crossing when better judgment would have shown that the water was too high.[120]

Promkooptrans officials also, however, felt persuaded that Tadzhikgosstroi often made it hard for transportniki to execute their duties. Its foremen were disorganized, often frustrating activities by directing shippers to wrong locations for loading or unloading. Other times, however, they added to confusion about jobs through long unexplained absences from work sites. When they were present, these personnel carried out their duties slowly and outside norms. In this "chaos," the Novyi Put' artel leader noted, sometimes "cigarette rolling papers are used for documentation." More urgently, freight haulers claimed that jobs went unfulfilled because the construction agency—allegedly well-stocked compared to most republican organizations—denied them "promised" supplies, including work clothes and food. Employees of the Trudovik artel claimed that, in one case, "fifteen horse-drawn wagons stood still for two whole days without fodder or money. People [and horses] were hungry, so work did not get done." Foremen added to the stress of these conditions by verbally abusing haulers. Allegedly, artel members sometimes escaped these conditions through "desertion."[121]

Ultimately, Promkooptrans officials came to explain and understand this dispute in terms of market relations that were interwoven with the planned economy of southern Tajikistan. To

[120] Record of proceedings of the 17 August 1930 meeting of transport artels of Promkooptrans together with representatives of Tadzhikgosstroi, TsGART, f. 93, op. 1, d. 14, l. 18b (full document is ll. 17a-19b).
[121] TsGART, f. 93, op. 1, d. 14, ll. 17a-b, 18b.

them, the main source of "spiteful relations between the artels and Tadzhikgosstroi [was] the shortage of fodder and clear rates [for services]" on the scale of the republic.[122] The issue of rates and expenses was part of the larger challenge to regulating and systematizing the relationships between shipping and economic organizations through the standardization of distribution. Economic organizations were expected to now recognize the distinctiveness of the freightage sector by paying for shipping according to state rates, contracted in advance.[123] The manner of satisfying payables, however, remained confusing. Sometimes, payments were due to one of the three cargo hauling organizations at regular or pre-determined intervals. In other cases, payments were due to artels on completion of individual shipments or jobs. Economic organizations' frequent failure to pay on time, or at all, further complicated accounting and often was an obstacle to shipping firm operations, depending on their levels of credit. As a 1933 Gosplan report alleged, "Promkooptrans [artels] of all republican regions are, without exception, forced to work outside the laws prohibiting commercial crediting of freightage [in service] for organizations owing large debts for previous deliveries."[124] Such statements make it difficult to unravel the dynamics of the significant stress that Tajikistan's freight hauling agencies and their clients were experiencing. Furthermore, historiographic disagreement over the nature of money usage in the early 1930s precludes conclusive explanatory frameworks.[125] What is clear is that

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[122] Ibid., ll. 18b-19a.

[123] TsGART, f. 146, op. 1, d. 78, ll. 42, 125-26.

[124] TsGART, f. 18, op. 1, d. 501, l. 195.

[125] For a recent summary review of the literature on the role of money in the Soviet economy of the 1930s, see Kristy Ironside, "The Value of the Ruble: A Social History of Money in Postwar Soviet Russia, 1945-1964" (PhD diss., University of Chicago, 2014), 14-37. To many scholars, the early Stalin era was characterized by a state attempt to convert the partial money market economy of the 1920s to one based primarily on budgets of "material balances" across sectors. For Gregory and Stuart, money had little impact on the planned economy but was nevertheless important as a kind of "monitoring device for assessing plan and other target fulfillment, especially at lower levels of the hierarchy." Gregory and Stuart, *Russian and Soviet Economic Performance*, 102, 115. Ironside shows that Soviet state publications and Stalin's own speeches of the 1930s explicitly described money as "an instrument in the planned construction of communist society." See Ironside, "The Value of the Ruble," 16-18. See also Nove, *Economic History of the USSR*, 215, 217.

money and credit were crucial to everyday economic life, including the viability of various kinds of enterprises, as well as personal and group ability to obtain sustenance.

Agencies were poorly equipped to track who used or owed how many funds, and they found it hard to map plans onto work that fell into overlapping spheres of responsibility. Soiuztrans sometimes did jobs originally allotted to Promkooptrans. Economic organizations still organized transportation in-house, but they were also expected to account for its cost and confer that to a designated service agency.[126] In this reality, accounting practices across organizations were conducted in a manner that did not adequately refer to budgets, creating planning problems in jurisdiction, compensation, and material support. These conditions promoted an array of supply and logistical problems that organizations, groups, and individuals needed to overcome on a daily basis.

Promkooptrans's explanation of artels' inefficiency and Tadzhikgosstoi's failure to provide material support to transportniki anticipated a widely held view that was repeated throughout the 1930s. It presented such issues as part of a constellation of continuing systemic challenges to laborers en route: shipping firms were less effective than planned because of a lack of caravanserais, forage corrals, and red teahouses (*krasnye chaikhany*) where drivers, drovers, and their animals could rest and recuperate and where equipment could be repaired.[127] Various other agencies, including Narkomtorg and Soiuztrans, had failed to establish support infrastructure, so shipping firms such as Promkooptrans were not accomplishing the work that

[126] TsGART, f. 146, op. 1, d. 78, l. 41.

[127] "Report on the condition of the Promkooptrans transport system, as of 1 January 1933," signed by Shturm (Presidium of Tajikistan's Industrial Council) and Paikin (Mass Organization Sector), 3 February 1933, TsGART, f. 18, op. 1, d. 501, ll. 194-95 (full document is ll. 191-197); and TsGART, f. 146, op. 1, d. 78, l. 41. For a discussion of red teahouses (and yurts), see Ali Igmen, *Speaking Soviet with an Accent: Culture and Power in Kyrgyzstan* (Pittsburgh: University of Pittsburgh Press, 2012).

economic organizations like Tadzhikgosstroi had contracted. Artels and their individual members, meanwhile, were not provided sufficient food or shelter, nor the monetary compensation with which to acquire it.

A Soviet market for shipping services

In early 1930s Tajikistan, central plans for supporting economic projects floundered. As I will demonstrate, a market for shipping supported planning where it was failing by facilitating exchange of materials and money for services and labor.[128] These conditions of mobility also perpetuated challenges to the desired command economy. Many scholars agree that by the middle of the decade, executive Soviet officials had come to see the existence of illegal and semi-legal markets and the use of money as a necessary complement to or support for the planned, material economy.[129] S. G. Wheatcroft and R. W. Davies argue that the explosive growth of the Soviet economy starting in 1930 "was based not on market pressure but on a planning process covering an increasingly complex economy."[130] In Tajikistan, however, the daily trials of economic reform on the ground levels of commodity exchange administration depended on the perseverance of a market for shipping services that also interfered with the transition to planning. Non-government labor arrangements, outside the plan, were officially illegal, and supervisory organizations often declared or implied that they wished to prevent such

[128] Scholars have argued that private entrepreneurship persisted throughout the Soviet era in the Khujand (Leninobod) region of northern Tajikistan. See Nourzhanov and Bleuer, *Tajikistan*, 94.

[129] R. W. Davies, "Changing Economic Systems: An Overview," in *The Economic Transformation of the Soviet Union, 1913-1945*, ed. R. W. Davies et al. (Cambridge, UK: Cambridge University Press, 1994), 15-17.

[130] S. G. Wheatcroft and R. W. Davies, eds., *Materials for a Balance of the Soviet National Economy, 1928-1930* (Cambridge, UK: Cambridge University Press, 1985), 34.

activities. Their explanations for not doing so, however, indicate broad systemic agreement about the benefits of permitting a market for commodity mobility, as I discuss below.[131]

Such justifications were likely predicated on the fact that some of the legal documents governing day-to-day shipping operations promoted temporary, market-like relations. The operating charters of the three freightage organizations appeared to be flexible in order to provide for contingencies. Soiuztrans, Tadzhavtotrans, and Promkooptrans had considerable powers of independent operation, including establishing contracts for their services. While Soiuztrans acquired powers of oversight in mid-1930, it is not clear how it affected the other two officially. Shipping practices from that point forward suggested that all parties continued operating as if Tadzhavtotrans and Promkooptrans had significant rights to autonomous action outside the plan that was clearly authorized by their own charters. These founding documents indicated that both agencies could enter into any contract relevant to their work and perform all forms and services of shipping, as well as tangential activities such as the sale and transfer of the means of transportation. Article 5 of the Promkooptrans charter is explicit in this respect. Its spacing within the document changes to double rather than single in order to highlight the agency's rights, as follows: "The union can use all legal means to acquire or dispose of property, conclude any kind of contract, including to secure the construction or leasing of an enterprise, land or other property, to take on contracts and delivery of goods…to hand out bills of exchange and any kind of commitment."[132] Just so, each firm's documented right to govern its own

[131] Stephen Kotkin discusses some evidence of a "private" market for various transportation services in Magnitogorsk in the 1930s. See Stephen Kotkin, *Magnetic Mountain: Stalinism as a Civilization* (Berkeley: University of California Press, 1995), 273-74.

[132] See Charter of the Tajikistan Union for Cooperative Transportation Designated as "Promkooptrans," signed by Deinichenko and two others (not legible) of the Promkooptrans Orgbiuro, and artel representatives Rogatkin (Kaiuko-Transport), Pronof'ev (Trudovik), Iudin and Boe (Sibirtransportnik), Gigor'ev (Karl-Marks), Abramovich (Khodzhent), and in the presence of Shaimov Abdu of the Kuriiat artel, and the unnamed, "illiterate" representative of the Mikhmat-Kishan artel, May 1930, TsGART, f. 93, op. 1, d. 23, ll. 2-3 (full document is ll. 2-17). Notably,

activities and resources promoted conditions in which upper-level authorities had limited jurisdiction in daily activities (at least theoretically).

In the case of Promkooptrans, the scope of its self-governing ability was supported by the manner in which daily shipping work was de-centralized. Until 1932, various agency offices across the republic had considerable authority to administer very large areas with little "central" oversight by the Promkooptrans executive. Offices in Qurghonteppa and Kulob served the southern regions going by those names but had little contact with the office based in Stalinabad, which also served the central Hissor Valley.[133] A 1933 Gosplan of Tajikistan audit showed that the form of separation of duties and activities among regions had promoted a situation bolstering a market for shipping services. The regional organization of Promkooptrans governance had not only meant "non-recognition of this [republican transportation] union." It also was a situation that enabled laborers "doing [unofficial] work on the side, etc."[134] Evidently, economic organizations were arranging ad hoc shipping services that were supposed to have been already contracted. These clients operated as if they had the right to hire transportation for cargo outside the plan in order to fulfill work targets.

The republican reorganization of Promkooptrans in September 1932 created smaller, better-governed regions, but former problems persisted. Shipping in southern Tajikistan of the

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Tadzhavtotrans was founded in December 1929, before Soiuztrans was established as its supervisory organization, so its charter documents may have been superseded. See Record of proceedings of the interdepartmental meeting held by Gosplan Tajik SSR on 27 May 1930 in Stalinabad (Supplement to the proceedings of 18 May 1930), TsGART, f. 146, op. 1, d. 78, ll. 55-56 (full document); and Charter of the Tajik Automotive Transport Joint-Stock Association, attributed to Markov (Narkomtorg TSSR), Dadabaev (Director of the Head Office of Dortrans Tajik SSR), and Liapin (Deputy Chairman of the Orgbiuro of Tadzhikgostorg), certified by signature of D'iakova (Clerk), with the charter being confirmed by Resolution No. 5 of the 24 December 1929 meeting of the SNK Tajik SSR, and registered with Narkomtorg Tajik SSR on 26 December 1929 in Register No. 3, TsGART, f. 146, op. 1, d. 78, ll. 243-56 (full document).

[133] The office based in Kanibodom, meanwhile, served the entire "north," with the exception of Uroteppa and Panjakent.

[134] TsGART, f. 18, op. 1, d. 501, l. 192.

early 1930s was a service for sale, whereby economic organizations frequently employed freightage labor for ad hoc tasks. The cotton sector enterprise Khlopstroi, for example, regularly hired shipping artels, including "camels, donkeys, and carts" for "independent" jobs.[135] Such arrangements were usually improvised on short notice, with enterprises sometimes enlisting cooperative workgroups or individual laborers to do additional duties in exchange for unplanned wages.[136] Although such a market for shipping services was officially undesirable, it was inevitable in regions where economic growth was concentrated. Tajikistan's southern valleys were the site of enormous state investment for establishing a productive cotton agricultural sector. Projects here were more ambitious than those of central and northern regions because they had less of an economic legacy to build on and poorer infrastructure. These conditions created operational needs that only the market for shipping could satisfy.

In Soviet data, coded in terms of central planning and control, this situation appeared as a contradiction. Economic growth moved forward rapidly in southern Tajikistan even though its local shipping agencies in the Qurghonteppa and Kulob regions had far lower rates of plan fulfillment than those of central and northern regions.[137] Had supply to the economic enterprises here stopped? To the contrary, freightage served them through activities that were outside the plan and explicit central control. Moreover, these operations were conducted with state property at times when officially planned activities were to be taking place. This market for shipping services was essential to achieving economic growth targets of "local" enterprises that had the material and monetary resources with which to obtain labor for cargo hauling. In the late fall of

[135] TsGART, f. 93, op. 1, d. 64, ll. 87-88; and TsGART, f. 146, op. 1, d. 78, l. 126.

[136] TsGART, f. 146, op. 1, d. 78, l. 125.

[137] Qurghonteppa and Kulob showed very low rates of fulfillment in planned transportation in 1932, at 39.8 percent and 51.9 percent, respectively—at a time when Stalinabad was at 81.3 percent and Kanibodom (in northern Tajikistan) was at 121.3 percent. See TsGART, f. 18, op. 1, d. 501, l. 192.

1930, Promkooptrans officials found that the members of artels in Qurghonteppa were "taking on unauthorized contracts" in such great number that it became nearly impossible to use transport resources to fulfill planned shipments.[138] The market for shipping thus also may have impeded work that might have been conducted in the mandated way.

The justifications that upper-level personnel usually used to explain shipping work outside the plan focused entirely on the laborers and rarely on whether agencies had the right to employ them. A late October 1930 Promkooptrans meeting agreed that the "chaotic condition" of artels in the Kulob region was the result of the fact that they "have no fodder, no living quarters, nor much for inventory."[139] Officials considered the Qurghonteppa region to be the most in need of reform in shipping, and successive reports of the early 1930s concluded that the situation would not improve if material support to artels did not become better.[140] In the spring of 1931, the Promkooptrans regional administrative office in Qurghonteppa had just one "recently acquired" caravanserai, having an area of 50 by 100 meters. It could not hope to accommodate even a fraction of the eighteen artels serving the city—totaling more than 600 people, 630 horses, 600 camels, 180 wagons, and 260 bullock carts that might might have been directed to it.[141] In fact, Promkooptrans had difficulty maintaining even this modest establishment. Lacking sufficient timber, the place did not have a proper dwelling space for humans or animals, so most would sleep in an open camp. Moreover, the Promkooptrans laborers of this region received no

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[138] Proceedings of "the organizing meeting of artel representatives with Promkooptrans commissioners of the Qurghonteppa Region, on 10 December 1930," TsGART, f. 93, op. 1, d. 64, ll. 74b-75a.

[139] Protocol No. 24 from the record of proceedings of a 24 October 1930 meeting of the Promkooptrans executive, attributed to Fazilov (Chair) and Ezhov (Secretary), TsGART, f. 93, op. 1, d. 14, l. 37a (full document is ll. 37a-38b).

[140] See TsGART, f. 93, op. 1, d. 14, l. 37a; Record of proceedings of the "Promkooptrans organizing meeting of 3 October 1930," TsGART, f. 93, op. 1, d. 24, l. 8 (full document); and TsGART, f. 93, op. 1, d. 64, ll. 74b-75a.

[141] The amount of pack and draft animals serving freightage over longer distances of southern regions numbered in the thousands.

more than half of standard quotas of most supplies. Only tea was supplied to specified norms. As a result, transportniki looked for food, and even adobe bricks for constructing shelters, in unofficial markets.[142] This demonstrates that the commodity chains serving southern Tajikistan of the early 1930s were so utterly dysfunctional that even the laborers who worked in shipping were not provided sufficient food and housing.

The undeniable challenges to daily life in Tajikistan also served managers and other officials as a justification for leniency in an era of purges across the USSR. The state was concerned with the market for labor in freightage because it reflected authorities' inability to control economic relations. In the 1930s, Soviet officials enforced some adherence to regulations—even in locales where conditions were harsh—by enacting regular "cleansings" of the personnel of all organizations.[143] But in Tajikistan, various audits of the three official shipping agencies and other supervisory organizations showed that officials often felt unable to compel labor because transportnkiki were so concerned with simple survival.[144] Artels that performed a wide variety of tasks for a large number of agencies, hauling everything from cereals and other food products to gravel and rock and cotton for export, all faced problems with supplies. It affected all of them differently depending on what they had as a result of their work histories. Even those that were well stocked with goods like food or boots found the need to seek other items in markets. These transactions, allegedly, sometimes involved commodity exchanges and other times money acquired through services or sale of goods—including those from

[142] TsGART, f. 93, op. 1, d. 64, ll. 80-81, 84.

[143] Fitzpatrick, *Everyday Stalinism*, 20.

[144] See, for example, Message addressed to Tadzhikmatlubot and the Construction Committee of the SNK Tajik SSR, attributed to Ivanovskii and Sergeev (Secretary) of the Stroimaterial trust, 28 June 1930, TsGART, f. 18, op. 1, d. 193, l. 14 (full document); and TsGART, f. 146, op. 1, d. 78, ll. 125-27. Paul Gregory and Mark Harrison argue this was a phenomenon common across the USSR. See "Allocation under Dictatorship: Research in Stalin's Archives," *Journal of Economic Literature* 43 (September 2005): 753-54.

shipments.[145] Official explanations emphasizing that laborers were forced into this situation by general privation also enabled the continuation of a market for shipping and survival. As one report pointed out, the result of inadequate food and equipment supply to transportniki was that "whole groups [of them] were abandoning artels to provide private charter services (in Stalinabad, Qurghonteppa, etc.)" in order to survive.[146]

Officials' reluctance to mete out punishment to shipping personnel in southern Tajikistan was also informed by the existing market for labor itself. Authorities were unwilling to discipline transportniki because of a shortage of suitable replacement laborers.[147] In fact, the very actions taken to reorganize shipping in 1930 were guided by this kind of reasoning. One example involved how Promkooptrans spared newly joining freightage teams the full audit required by incorporation procedures. An agency representative deployed to Shahrinav, west of Stalinabad, explained that he judged it best to forego obliging local agents to provide the kind of records normally expected in the process of association. They were well-established providers of services to local enterprise, but they had used procedures that were outside the plan and policy and without proper documentation. Most of them, he explained, did not even belong to a formally organized artel. They were, however, experienced haulers who had worked in shipping locally for a long time. The Promkooptrans representative emphasized that this would make them valuable agency affiliates, worthy of breaking the rules of incorporation.[148]

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[145] TsGART, f. 93, op. 1, d. 64, ll. 89-95.

[146] TsGART, f. 18, op. 1, d. 501, l. 195.

[147] Record of proceedings of the meeting of the organizational board of Promkooptrans of the Tajik SSR, 18 September 1930, TsGART, f. 93, op. 1, d. 24, ll. 1-2 (full document is ll. 1-4).

[148] Report addressed to the Organizational Department of Promkooptrans, 7 April 1930, TsGART, f. 93, op. 1, d. 20, l. 1. (full document)

These particular transportniki were also valued because of their nationality. Most of them were Tajiks and Uzbeks, while most Promkooptrans land-based shipping personnel in southern Tajikistan were identified with other nationalities.[149] The presence of a greater number of Tajiks and Uzbeks helped the agency comply with Soviet regulations governing the demographics of state organizations. This so-called nationalities policy required that all economic and government sectors employ a ratio of ethnic and national groups that reflected the demographics of regions and republics in which they operated. The policy, though it went through various forms and iterations in the 1920s and 1930s, is a cornerstone of all scholarship on Soviet and post-Soviet Central Asia. It was responsible for the creation of the republics in the region and also, some would argue, for the definition of local identities. Nation and nationalities policy were a key context for every Soviet endeavor in early independent Tajikistan.[150]

The representative to Shahrinav was pleased that most of the shipping agents in the area were appropriately Tajik or Uzbek because the wider organization's personnel demographics violated Soviet regulations in a manner that was typical throughout Central Asia. In the early 1930s, most Promkooptrans artels were composed of individuals from outside the region. Individual workgroups were relatively homogenous in makeup: they included few locals or other identity groups.[151] The majority of these transportniki came from "European" regions of the USSR. The largest national groups were Russians and, to a lesser extent, Ukrainians. Following them, well-represented groups included Ossetians, Turkmen, and Tatars. Tajiks and Uzbeks were

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[149] See TsGART, f. 93, op. 1, d. 20, l. 1; and TsGART, f. 93, op. 1, d. 24, l. 8.

[150] See Arne Haugen, *The Establishment of the National Republics in Soviet Central Asia* (Houndsmills, Hampshire, UK: Palgrave Macmillan, 2003); and Terry Martin, *The Affirmative Action Empire: Nations and Nationalism in the Soviet Union, 1923-1939* (Ithaca: Cornell University Press, 2001).

[151] Notably, Promkooptrans rafting artels of the same period, operating especially on the Amu Darya and Vakhsh rivers, between Termez and southern regions of Tajikistan, were composed of much higher numbers of native residents. Uzbeks made up more than half of their personnel. See a report addressed to Promkooptrans Executive in 1931, TsGART, f. 18, op. 1, d. 216, ll. 203-11 (full document).

least numerous in official documents.[152] The national composition of the Promkooptrans artels of the Qurghonteppa region in November 1930, for example, was 60 percent Ossetian and 30 percent Russian, with only the remaining 10 percent identified vaguely as "local nationality."[153] This shipping sector reflected a larger pattern of labor demographics across Central Asia of the 1920s and 1930s. Studies have shown that, statistically, Russian or "European" cadres monopolized most of the highly skilled and high-wage jobs in the region. The phenomenon is typically seen as part of a wider colonial relationship wherein foreigners could ensure stability and enable the harvesting of primary resources for processing outside Central Asia.[154] This view of an exploitative settler imposition corresponds to general agreement that "policies were largely determined in Moscow, and local interests were subordinated to all-Union goals."[155]

Such large-scale characterizations ascribe intentions to authorities in Tajikistan that should be reconsidered. Promkooptrans documents reflect that many officials desired the realization of nationalities policy but believed that the nature of the market for shipping labor made it difficult to alter personnel demographics. Upper-level officials' decision not to force the implementation of nationalities policy was informed by an unwillingness to endanger ongoing daily activities in commodity exchange. They believed that interfering in the norms of freightage operations would threaten wider economic growth projects. From this perspective, a practical

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[152] TsGART, f. 93, op. 1, d. 96, ll. 264-71, 275, 349-52, TsGART, f. 93, op. 1, d. 64, ll. 89-95.

[153] Resolution no. 27 from proceedings of a 4-5 November 1930 meeting of the Promkooptrans executive in Stalinabad, signed by Fazilov (Chairman) and Ezhov (Secretary), TsGART, f. 93, op. 1, d. 14, ll. 47a-b (full document is ll. 47a-50a).

[154] See, for example, Boris Z. Rumer, "Central Asia's Cotton Economy and Its Costs," in *Soviet Central Asia: The Failed Transformation*, ed. William Fierman (Boulder, CO: Westview Press, 1991), 83.

[155] Ronald Grigor Suny, *The Revenge of the Past: Nationalism, Revolution, and the Collapse of the Soviet Union* (Stanford: Stanford University Press, 1993), 112-13.

appraisal of the market for shipping services helped obstruct the anti-colonial ideological imperatives of nationalities policy.

This is striking because some Promkooptrans officials were resolved and motivated to honor the central mandate. Even more surprising, some authorities favored the affirmative action process for the distinctly practical and strategic benefits that they imagined it would afford. At one level, they believed that employing more native residents would be a way of weakening the "anti-Soviet element"—notably, the Basmachi guerrilla fighters—that obtained support from natives by identifying Soviet governance as a foreign occupation.[156] At the center of this appeal to the "hearts and minds" of regional peoples, however, was an even more important, economic calculation: employing laborers who were deemed natives was cheaper than hiring ones from outside the region. Much of the work of shipping was low-skill tasks that officials judged appropriate for people identified as local residents because, allegedly, they usually lacked foreigners' training and experience. Nationalities policy across all economic sectors in Tajikistan meant saving the state money because less proficient individuals could be paid less. The unidentified author of one report explained that "qualified Russian workers demand higher wages." Laborers from the native population, "because of their lack of experience, do not earn even the official established normal [amount]."[157] To executives at a Promkooptrans meeting, extending local jobs to the majority native population would help accommodate the "tense financial situation of the Republic."[158]

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[156] On the Basmachi movement, see, for example, Beatrice Penati, "The Reconquest of East Bukhara: The Struggle against the Basmachi as a Prelude to Sovietization," *Central Asian Survey* 26, no. 4 (December 2007): 521-38; and Nourzhanov and Bleuer, *Tajikistan*, especially pages 60 and 100-101.

[157] TsGART, f. 18, op. 1, d. 101 (t. 1), ll. 55-57.

[158] TsGART, f. 93, op. 1, d. 14, ll. 47a-b.

In this respect, transportniki were little more than means to an end for the upper Promkooptrans officials. They were a form of human capital used to fulfill an economic function. The failure of nationalities policy among shipping personnel in Tajikistan in the early 1930s was the result of upper-level officials trying to carefully manage their view of the discontinuities between planned economic growth and the real, local capacity for reaching those aims. Under Tajikistan's dependency regime, most of its capital—human or otherwise—was essentially donated by other regions of the USSR. Since organizing the training and support required to employ large numbers of Tajiks or Uzbeks in the hauling sector was complicated and expensive, officials opted for the easier path of using what they had amassed through importation—as with timber, metal products, and all manner of other materials. Comparing this explanation for the demographics of freightage labor in Tajikistan to a similarly foreign upper cadre across Central Asia is difficult without more data or a clear policy or other explanation. The Promkooptrans perspective recommends avenues for reconsidering the demographics of those higher officials in terms of staffing operations as they were discussed by specific organizations' administration. Explorations of evidence about personnel management from within institutions may illuminate rationales, motives, relationships, and discourses that are unfamiliar in the scholarly literature.

Transactions for shipping services involved a labor market that comprised inequalities. Officially, freightage managers discriminated against national groups that were legally entitled to greater representation. On the less official side of the market for shipping, economic organizations were suspected of taking advantage of cargo haulers through means other than exchange. The influence that came with the ability to compensate transportation providers also included the power to sometimes obtain services through forms of coercion. Upper-level

shipping officials were concerned that some ad hoc shipping service activities were the result of intimidation or force. Some economic organizations allegedly engaged in the practice of "detaining caravans and wagons in order to put their drovers and drivers to work for local interests."[159]

This possibility points to another instance of "symbiosis," to borrow from Osokina, between market and central control in 1930s Tajikistan. My analysis of the supervisory practices and rationales associated with everyday shipping shows that managers were often most interested in the ends afforded by workers at a time when forced labor now existed alongside wage labor in the USSR.[160] This context raises questions about officials who identified privation as the cause of ineffectiveness in cargo hauling. Were their words genuinely sympathetic? Instead, they may have been carefully calculated assessments that implied limited opportunities for coercion in freightage practices.

The complicated ethical context of the market for labor in shipping services is especially salient in cases where such workers were themselves imported. When humans were treated as a form of capital to be imported and then employed, Soviet officials encountered familiar challenges that had very different implications for daily economic life. As I will show, shipping and other organizations tried to apply similar administrative practices to imported labor, but found that human capital often interfered with state imperatives in ways that it did not anticipate, and could not control. Humans had independent agency and—being alive—required accommodation that other kinds of capital did not. While timber could rot or catch fire if left in an unattended pile for weeks, humans could die or fail to work efficiently if they were

[159] TsGART, f. 146, op. 1, d. 78, l. 125.

[160] Andrew Sloin and Oscar Sanchez-Sibony, "Economy and Power in the Soviet Union, 1917-1939," *Kritika: Explorations in Russian and Eurasian History* 15, no. 1 (Winter 2014): 19.

mishandled or unfed for a couple of days. Some would flee or refuse to work if they thought this was a possibility. The reality of independent travel as an option to laborers in response to their conditions demonstrated the insufficiency of scholarly understandings of migration and settlement in the southern regions of Tajikistan. In the 1920s and particularly the 1930s, hundreds of thousands of people migrated to Tajikistan's southern regions, voluntarily, semi-voluntarily (because of incentives or contracts), and as a result of state coercion. Most of them traveled from other parts of the republic to settle southern agricultural regions.[161] Some of them were return-migrants who had fled to Afghanistan during the post-tsarist wars. (Indeed, identifying who was native in southern Tajikistan is difficult.) One "resettlement" campaign in January 1930 involved the migration of more than 2,500 households from Uzbekistan and northern Tajikistan (Khujand, Panjakent, and Uroteppa regions). Because of transportation problems between Termez and Dushanbe, more than five hundred households were forced to travel on foot.[162] Due to such conditions, and severe insecurity (of employment, sustenance, etc.) departure rates of settlers were quite high—possibly as much as equal to a third of immigrant numbers each year.[163] Transport workers shared many of the same experiences and attributes, though their nationality was more often foreign. Their experiences were characterized by considerable difficulty and fragility in service of a state that barely held itself together.

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[161] Christian Bleuer, State-building, Migration and Economic Development on the Frontiers of Northern Afghanistan and Southern Tajikistan," *Journal of Eurasian* Studies 3 (2012): 75-77. Other sources also comment on the dehumanizing administrative terminologies that characterized Soviet management of migration. Rebecca Manley finds that its methods and language were influenced by military practices during WWII. See Rebecca Manley, *To the Tashkent Station: Evacuation and Survival in the Soviet Union at War* (Ithaca: Cornell University Press, 2009), 30-31. See also Lewis H. Siegelbaum and Leslie Page Moch, "Resettlers," chapter 1 in *Broad is My Native Land: Repertoires and Regimes of Migration in Russia's Twentieth Century* (Ithaca: Cornell University Press, 2014), 16-65.

[162] Message (urgent) titled "Resettlement," from Narkomzem to the Hissor Region Procurator (in Stalinabad), no. 7/1416, copy attributed to Maizel' (Deputy Director of Narkomzem), Leont'ev (Head of Land Devlopment), and Ishanov (Director of the Office of Resettlement, 8 April 1930, TsGART, f. 146, op. 1, d. 78, ll. 108a-b (full document).

[163] Peterson, "Technologies of Rule," 443-444.

The case of one particular group of laborers imported in 1930 is emblematic of the manner in which humans were often treated as capital. Soiuztrans contracted them near Petropavlovsk in northern Kazakhstan, and had them travel to Stalinabad where many of them found a hard fate including extreme poverty, abuse, illness, and death. Most of what I know about them is based on documentation of an artel that at least some of them formed, called *Sibirskii Transportnik*. This workgroup was only active for three months before it was liquidated, leading to a control commission's investigation. The investigation found that Soiuztrans and other state agencies were responsible for the starvation and desertion of many of the members of this new artel. Rather than recommend substantial procedural revisions or punitive actions of responsible officials, however, the control commission closed the matter by accounting for the inventory of the labor cooperative, and setting out a way to balance its accounts.

From the start, the endeavor of acquiring the laborers from Petropavlovsk was conducted like a negotiation for any other physical goods. Soiuztrans enacted a complex operation, whereby it engaged republic agencies in lobbying various other Union institutions, as well as by deploying its own tolkachi to Kazakhstan to draw up contracts and arrange the logistics of transporting the laborers to Tajikistan. At least three delegates were in Petropavlovsk by February, to hire labor and to help coordinate lobbying efforts based in Stalinabad. Such labor envoys were frequently used to help ferry laborers across vast distances, ensuring they obtained supplies, while chartering passage and transportation, and helping them navigate the multitude semi-legal and illegal arrangements needed to do so.[164] One of those in Petropavlovsk was later alleged to have lied about his status as a representative of the Tajikistan SNK to appear more

[164] See for example, TsGART, f. 146, op. 1, d. 78, l. 118.

credible.[165] Reporting by telegraph, he and the others ascertained the availability and cost of laborers, as well as their horses and carts, and sought contracts with assembled artels workgroups willing to work in Tajikistan. By March, the head Soiuztrans envoy, named Boiar, had succeeded in acquiring signed agreements for an unknown number of "diggers" (*grabari*).[166]

The group consisted primarily of peasants who were natives of the Petropavlovsk region.[167] These so-called "volunteers" were actively involved in the process of recruitment and the decision to go to Tajikistan, though it is not clear how much influence they had over the situation. During a 6 April 1930 meeting, a majority of them or their representatives voted to approve the move, as well as the officers of the group to travel. They explicitly did so because Boiar promised them housing, food, and wages, in in exchange for work.[168] This was not a simple matter of forced migration.

Even so, agencies from across the USSR were heavily involved in mediating the laborers' ultimate departure, demonstrating that agreements signed in Petropavlovsk did not necessarily guarantee travel. In April, Tajikistan officials felt obliged to make significant lobbying efforts to ensure that the volunteers would arrive. Soiuztrans convinced several higher republican institutions to demand that "central Moscow organizations" interject.[169] Tolkachi progress

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[165] Report on the findings of the Liquidation Commission for transportation artels, certified by signature of Liquidation Commission official [illegible], TsGART, f. 93, op. 1, d. 94, l. 11 (full document is ll. 11-13), attached to Extract from Resolution no. 31 of the meeting of the Promkooptrans Management held on 8 December 1930, attributed to Fazilov (Chairman) and Ezhov (Secretary), certified by signature [illegible], TsGART, f. 93, op. 1, d. 94, l. 10.

[166] Record of proceedings of "the general meeting of the Petropavlovsk group of peasants held on 6 April 1930 at 12 o'cklock to explain the commission's approval of the departure for the Tajik SSR," handwritten in pencil, signed by Zaitsev (Chairman), Makarov, seven others [illegible], TsGART, f. 93, op. 1, d. 17, l. 2 (full document is ll. 1a-4a).

[167] TsGART, f. 93, op. 1, d. 94, l. 11.

[168] TsGART, f. 93, op. 1, d. 17, ll. 1a-4a.

[169] Message addressed to SNK TsIK KP, RKI, and Narkomtorg of the Tajik SSR, no. 328, attributed to Bekhseev (Director of TadzhDortrans), Korzhavin (Operations Officer), and Sviderskii (Head Administrator), 26 April 1930, TsGART, f. 18, op. 1, d. 102, l. 209 (full document).

reports had alerted them that Kazakhstan authorities were interfering with the labor transfer, contradicting recent resolutions of the SNK of both the USSR and the RSFSR. The Tajikistan SNK responded by aggressively courting multiple bodies of the USSR and the RSFSR, and accusing their comrades in Kazakhstan of hoarding. In one case, the SNK Chairman strongly urged his counterpart in Russia, the eminent Kazakh, Turar Rysqulov, "to instruct Petropavlovsk to stop getting in the way."[170]

One of the key rhetorical strategies used by Tajikistan lobbyists was to draw attention to the fact that their northern neighbors were disproportionately privileged. As I demonstrated in Chapters 1 and 2, Soviet conversations about matters of economic growth, and that which was desired for Tajikistan, were already characterized by a global awareness of the relative lack of infrastructure and other legacies of the republic's physical environment. Here, Soiuztrans officials and others relied on a teleological framing for spatial and resource inequality within Central Asia, as throughout the wider USSR. The laborers that they contracted had just been used in the construction of the Turksib Railroad. This touted symbol of Soviet progress in Asia extended through Kazakhstan, from Siberia to Tashkent. Most of the work on it was done between 1928 and April of 1930.[171] Tajikistan officials pointed out that the Turksib was all but finished, and argued that they now needed its construction resources more than Kazakhstan; it

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[170] Message addressed to Ryskulov (SNK RSFSR) and the construction offices of Pusstroi, NKPS, and Tranzemstroi (all in Moscow), attributed to Khojibaev (Chairman of SNK Tajik SSR) and Karzhavin (Operations Officer), 8 April 1930, TsGART, f. 18, op. 1, d. 102, l. 192 (full document). See also Message addressed to A. I. Vykov (Chairman of the SNK USSR), copied to the Permanent Representation of the Tajik SSR, signed by Sluchak (Deputy Chairman of SNK Tajik SSR), 25 March 1930, in Stalinabad, f. 18, op. 1, d. 102, l. 170 (full document); Message addressed to Lezhava (SNK) in Moscow, attributed to Khojibaev (Chairman of SNK Tajik SSR), 8 April 1930, f. 18, op. 1, d. 102, l. 193 (full document); and Message addressed to Anvarov (Permanent Representation of the Tajik SSR in Moscow), attributed to Khojibaev, 8 April 1930, f. 18, op. 1, d. 102, l. 198 (full document).

[171] Matt Payne, "The Forge of the Kazakh Proletariat? The Turksib, Nativization, and Industrialization during Stalin's First Five-Year Plan," in *A State of Nations: Empire and Nation-Making in the Age of Lenin and Stalin*, ed. Ronald Gregor Suny and Terry Martin (New York: Oxford University Press, 2001), 224.

was now Tajikistan's turn to advance economically. The implication was that Soviet officials who willfully hoarded resources, including labor, made Tajikistan a victim of geography, exacerbating its vulnerability on the edge of the USSR. Kazakhstan, they claimed, benefitted disproportionately from closer proximity to Russia, and thereby the sources of established commodity chains. Soiuztran officials intended to use the new laborers to support road construction. As late as the end of April, they complained that Kazakhstan authorities "systematically undervalue the need to effectively appraise the evident importance of supporting and securing the highways of our borderland."[172]

The laborers finally arrived in Stalinabad during the first week of May 1930, expecting their contracts to be fulfilled. Instead, local officials offered them neither housing nor food, demanded work beyond their means, and withheld the wages they had been promised in Kazakhstan. Officials later concluded that these material problems had were rooted in a dysfunctional, complicated bureaucracy, with ultimate fault lying with Soiuztrans. None of their assessments, though, observed that Tajikistan agencies were unprepared to handle the incoming laborers in early May because they were unaware of their immanent arrival. The migration from Petropavlovsk was most likely already underway by the time that Tajikistan agencies complained in late April that Kazakhstan was continuing to interfere. The laborers traveled with their families, horses, and equipment, some of which died on the way.[173] Altogether, they comprised 1,678 people, of whom 1,200 were laborers, accompanying them were about 1,500 horses.[174]

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[172] TsGART, f. 18, op. 1, d. 102, l. 209.

[173] Record of proceedings of the 9 may 1930 general meeting of the members of the Sibirskii Transportnik artel made up of groups from Petropavlovsk and N[ovo]-Sukhotinsk, having 266 individuals present, signed by Iudin (Chairman of the meeting) and Pankov (Secretary), TsGART, f. 93, op. 1, d. 23, ll. 22-23 (full document).

[174] Message addressed to Khojibaev (SNK Tajik SSR in Stalinabad), attributed to Anvarov (Moscow), received 15 April 1930, TsGART, f. 18, op. 1, d. 102, l. 197; and TsGART, f. 93, op. 1, d. 94, l. 11.

The special commission later recounted that when the group arrived, unprepared officials directed it to lands on the outskirts of Stalinabad. There, "under the open sky", they got there "just as heavy rains arrived, and since people had no apartments, tents, nor [appropriate] clothing, they lay in the mud."[175] Because of these conditions, disease started to affect the migrants, as well as their horses, almost immediately.

These stressful circumstances were made worse by the disorganized work environment the laborers encountered. Large numbers of them formed the artel called Sibirskii Transportnik within the Promkooptrans system by 5 May.[176] At a practical level, their labor activities were characterized by confusion that stemmed from the lack of clarity about authority. They were subject to at least two organizations besides Soiuztrans. At a time when Promkooptrans was gradually becoming the dedicated shipper for Tadzhikgosstroi, Sibirskii Transportnik worked for the construction agency in the transportation of rock, sand, and gravel in a road project, partly in cooperation with TGDT.[177] Having several new managers in a new place led to confusion over who the laborers worked for, and who should pay them. In the meantime, Boiar and Iudin, two of the tolkachi who had contracted the laborers in Kazakhstan were now assigned as advisers to the

[175] TsGART, f. 93, op. 1, d. 94, l. 11.

[176] Record of proceedings no. 31 of the 3 December 1930 meeting of the management of Promkooptrans , attributed to Fazilov (Chairman) and Ezhov (Secretary), TsGART, f, 93, op. 1, d. 14, l. 103 (full document is 102-104b); and TsGART, f. 93, op. 1, d. 94, l. 10. Apparently, two-hundred and sixty-six of its members were present at Promkooptrans' incorporation meetings. See TsGART, f. 93, op. 1, d. 23, ll. 22-23. This was far more than the seven other artels' at these meetings, and also far larger than the ostensible average Soviet artel size of twelve to fifteen, as defined by Kuromiya. See Record of proceedings of the 27 May 1930 meeting of Promkooptrans artel representatives in Stalinabad, signed by Grigor'ev (Chairman of the meeting) and Deinichenko (Secretary), TsGART, f. 93, op. 1, d. 23, ll. 29-30 (full document); and Kuromiya, "Workers' Artels and Soviet Production Relations," 72.

[177] Record of proceeding of the 25 June 1930 interdepartmental meeting held by Narkomtorg Tajik SSR," Drondin (Chairman) and Ravich (Secretary), TsGART, f. 18, op. 1, d. 182, l. 24 (full document is ll. 23-25); and TsGART, f. 93, op. 1, d. 94, ll. 11-12.

artel, with the responsibility of for ensuring that they acquired food and fodder, equipment, and housing, as well as expert personnel—a task they failed to fulfill .[178]

The control commission would later find that ultimate responsibility fell with Souiztrans, though fault lay with all of the agencies involved. As in other cases of freightage management, lines of authority were often vague, a situation that led to wasted resources and failing projects. The investigation concluded that transportation union was guilty of not only poor planning, but also of outright abuse in some cases where the artel protested its conditions.

> They [the laborers] asked Soiuztrans about the temporary availability of some barracks or tents, but they were always denied. The [Stalinabad] manager of Soiuztrans, Comrade Bizenkov, once traveled to [where they lived]…They surrounded him, asking him for assistance in finding apartments to use during periods of rain, at least for the little kids. To these requests, Bizenkov replied: with apartments, you'll be working off your debts for twenty-five years. And with that, he drove off, trailed by their curses.[179]

The commission report, however, misrepresented the intentions of Soiuztrans officials, painting the situation as a far simpler case of negligence than it was. In fact, they were distressed about this situation, but felt limited by rules defining jurisdiction over types of administration. They frequently communicated their concerns to the Tajikistan SNK because, officially, the kinds of basic provisions needed by the artel were supposed to be provided by the "State Insurance Agency", *Gosstrakh*. This organization refused to act without direct official orders from higher-up. When those orders finally arrived, it refused to cooperate on account of a shortage of financial and material resources.[180] Tadzhikgosstroi, meanwhile, paid the laborers only eight or

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[178] Record of proceedings of the 10 May 1930 meeting of the members of management of the Sibirskii Tranportnik Artel and the Revisionary Transportation Committee, signed by D. Boiar (Chairman) and Pankov (Secretary), TsGART, f. 93, op. 1, d. 23, ll. 25-26 (full document is ll. 24-26).

[179] TsGART, f. 93, op. 1, d. 94, l. 11.

[180] Message to the Construction Committee of the SNK Tajik SSR, signed by Bolchenkov (Soiuztrans) and Deinichenko (Promkooptrans), 31 May 1930, TsGART, f. 18, op. 1, d. 182, l. 109 (full document); Message to the Construction Committee of the SNK Tajik SSR, no. 1545, signed by Bizenkov (Head Administrator) and Egorov (Director of the Automotive Transport Office), 2 June 1930, TsGART, f. 18, op. 1, d. 182, l. 110 (full document);

nine rubles each per unit of work, while their contracts vaguely assured compensation of from "twenty to thirty rubles." The construction agency also allegedly demanded too much work relative to feed for the horses. Compensated an apparently low 4 kilograms of hay per cubic meter hauled, the horses were unable to keep up, and gradually became mostly incapable of working.[181]

The members of Sibirskii transportnik responded to these dire conditions by taking matters into their own hands, and by reneging on their commitments to Soiuztrans, as well as to each other. Early on, the desperate situation encouraged theft among laborers. Allegedly, a small number who had access to collectively held money refused to share parts of it with certain other workers. This was possible because the artel—in traditional fashion—received payment as a group, which was held by a few representatives responsible for distributing wages. But when it came to money received from Soiuztrans in Kazakhstan, and from Tadzhikgosstroi in Tajikistan, many laborers alleged that they received nothing from artel leaders. To earn money, many transporniki began to hire themselves out to other departments' projects, where pay was better and unmediated, and where more feed was given their horses.[182] Such semi-legal and illegal behavior of artel members was the result of their having been illegally mistreated by upper-level officials. Without food and fodder, workers turned to private markets where their search for basic subsistence was rewarded. They turned to Soviet agencies that were not authorized to hire them, and paid money for work unlike the labor they had officially been contracted to do.

Message to the Construction Committee of the SNK Tajik SSR, no. 87, signed by Bizenkov (Head Administrator) and Deinichenko (Promkooptrans), 2 June 1930, TsGART, f. 18, op. 1, d. 182, l. 111 (full document); and TsGART, f. 93, op. 1, d. 23, ll. 25-26.

[181] TsGART, f. 93, op. 1, d. 64, ll. 89-90.

[182] TsGART, f. 93, op. 1, d. 94, ll. 11-12.

These were survival strategies that still did not make up for the profound lack of support to Sibirskii Tranportnik. Instead, they only seem to have accelerated the ultimate dissolution of the artel. The continuing shortage of sustenance and board encouraged conditions for the spread of disease among humans and animals. Horse deaths became common. The trauma of their situation led members of the artel community to seek more extreme ways of surviving, which investigators later called "a wild state of being." Government agencies concerned with hygiene saw the workgroup's living conditions as a danger to the wider public, and by mid-June transferred the laborers down the Dushanbe River, four kilometers beyond the city limits.[183] "Finding themselves in such conditions," investigators would explain, "members of the artel were driven to disband."[184] Some of them took shelter in the compounds of other departments. A sizeable number, however, trashed or sold the property in their possession, stole money, escaped "to who knows where." Many were never located. The state, for its part, waited until mid-August to officially declare Sibirskii Transportnik a failure and liquidate it. Boiar reappeared in the story now as head of the liquidation commission, and took stock of what was lost in terms of material, animal, and human resources, and reintegrated the remaining inventory into other artels.[185]

This administrative practice of liquidation, reclamation, and reintegration was the common way that interdepartmental governance reconciled ambitious projects with failure in an effort to account for resources at their disposal. In December, a control commission investigated the case of Sibirskii Transportnik, as well as several other Promkooptrans artels liquidated for violations of the law and general disorderliness. Such investigations were efforts to understand

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[183] Message to the Construction Committee of the SNK Tajik SSR, no. 1740, copy attributed to Nazarov, Gladkikh, and Poppel' (all of the Gosstrakh Administration), 13 July 1930, TsGART, f. 18, op. 1, d. 182, l. 114 (full document).

[184] TsGART, f. 93, op. 1, d. 94, l. 11.

[185] TsGART, f. 93, op. 1, d. 94, l. 11.

human tragedies in terms of their effect on the economy. While some of them were differentiated by specialization in means of transportation, they shared in common the experience of working in a wide variety of capacities, and under the direct authority of agencies ranging from Dorstroi, to Vakhshstroi and Tadzhikgosstroi—sometimes all of them and others—and hauling everything from cereals and other food products, to gravel and rock, and cotton for export. More importantly, they all faced problems with supplies that they overcame through illegal activities. The market for shipping services supported artel members' needs to acquire materials in ways that were beyond state control. Even those that were well stocked with certain goods, like food or boots, found the need to seek other items in unofficial markets, often finding the funds to pay for them by selling some of their own property, or even part of their shipments. [186] The December commission knew that material stresses had forced the artels into these situations, and it directed much of the blame at the supervising shipping agencies. In the case of Sibirskii Transportnik, it found that, not only was Soiuztrans ultimately responsible for what had happened, but also that a fake SNK representative it had deployed to Petropavlovsk, a Comrade Surin, had knowingly lied about what his employer could offer the migrants on arrival.[187]

The control commission's primary concern, though, was always with closing the account books of every artel. It found that, at the moment of liquidation, Sibirskii Transportnik was 12,500 rubles in debt, aside from 50,000 rubles owed Soiuztrans.[188] Debts to organizations were often transferable to parties at the other, usually receiving, end of a shipping event, and could be recovered if the artels accounts books were adequately kept. Despite several artels having left large debts after liquidation, the control commission agreed that, as in the case of Novaia Sibir,

[186] TsGART, f. 93, op. 1, d. 64, l. 89-95.
[187] TsGART, f. 93, op. 1, d. 14, l. 103; and TsGART, f. 93, op. 1, d. 94, ll. 10-11.
[188] TsGART, f. 93, op. 1, d. 14, l. 103; and TsGART, f. 93, op. 1, d. 94, l. 10.

dissolving them and redistributing their property was usually more "profitable" following significant desertions.[189]

Conclusion: Exchange and material change

At the Fifth Congress of the Communist Party of Tajikistan in January 1935, the Deputy Chairman of the republican SNK, Maksumov, commented on the progress commodity chains had made in the country. He pointed to the impressive growth of "commodity turnover" as closely linked to Tajikistan's great strides in industry and social welfare. "If you look at the overall figures on the growth of commodity turnover in Tajikistan, they show that where they amounted to about 71 million rubles worth in 1930, they came to 214 million rubles in 1934—a rise of about 300 percent."[190] He congratulated the personnel involved because they had helped build up the Soviet project by improving the quality of life and "happiness" of each citizen. These and other measures, he explained, were "characteristic of the way that commodity turnover is unfolding, of the growth of the material well-being of the laboring masses, and of the extent to which industry is satisfying their needs."[191] Major economic growth projects were underway throughout the republic. Tajikistan was changing so fast in the early 1930s that one report claimed: "It sounds like a paradox, but there were in fact months when you could not find a plot for construction in Stalinabad and in other locations."[192] The capital's population had

[189] TsGART, f. 93, op. 1, d. 14, l. 103; Findings of the Liquidation Commission regarding the Novaia Sibir' artel that operated in the Iangi-Bazar region, copy dated 10 November 1930 in Stalinabad, TsGART, f. 93, op. 1, d. 14, l. 105 (full document; handwritten original is at TsGART, f. 93, op. 1, d. 14, ll. 108a-b); and Statement of the Liquidation Commission regarding the Novaia Sibir' and Krasnyi Transportnik artels of Promkooptrans, attributed to Iudin, copy dated 10 December 1930 in Stalinabad, TsGART, f. 93, op. 1, d. 14, l. 106 (full document).

[190] TsGART, f. 18, op. 1, d. 1274, l. 109.

[191] TsGART, f. 18, op. 1, d. 1274, l. 109.

[192] TsGART, f. 18, op. 1, d. 1140, l. 8.

grown to about 40,000 people. In the course of the decade various buildings were built to house such educational organizations as a medical school, a technical school for women, and a pedagogical institute. In 1937, the city enacted the construction of the first "multi-story buildings" for lodging.[193]

The success of the republic's commodity chains was real and yet paradoxical. They had undeniably led to significant economic growth desired by planners, but operated in a manner what was at odds with ideology and law. I have argued that the Soviet commodity chains that supplied projects to alter the physical environment of Tajikistan were characterized by material exchanges that were beyond central control. Freightage within the republic and across the USSR supported the environmental management state through activities enabled by varying degrees, and sometimes the absence of, legality. Furthermore, I demonstrated that Soviet institutions and relationships were often organized in ways that created ambiguity about hierarchy and law. This opacity facilitated the unorthodox daily operations of cargo transportation; it was critical to their functioning, and ultimately to economic growth.

If authorities tolerated unofficial and illegal freightage practice earlier in the republic's existence on the grounds that it was necessitated by regional conditions, they later viewed it as an integral part of the way that the economy worked. This is partially attributeable to the fact that state ambitions in economic growth only expanded, and commodity chains were simply too poorly organized and inefficient to keep up with the rapidly growing needs of the local economy. Maksumov's speech acknowledged that while comparisons with the first year of the republic

[193] M. Ubaidulloeva, ed., *Istoriia goroda Dushanbe (s derevneishikh vremen do nashikh dnei)* (Dushanbe: Isp. organ gos. vlast. goroda Dushanbe i akademii nauk resp. Tadzhikistan, 2004), 238-40.

were remarkable, current operations had only reached about eighty-nine percent of the target.[194] In the mid-1930s, officials pointedly complained that constant delays and non-fulfillment of shipping orders is "wrecking construction of facilities of the city of Stalinabad (warehouse, a school, a theater, special works, etc.)."[195] Others, however, were sympathetic to the fact that the work of shipping was difficult in a context where construction projects progressed without clear plans, and months in advance of expected "contract campaigns" for official arrangements with banks, hauling agencies, and other organizations.[196]

In this context, the diverse interests involved in commodity chains kept the markets for freightage services that had sustained first efforts for economic growth within operations because they worked. Karamov, for example, reported that many organizations of the mid-1930s did their best to circumvent official procedures at the Stalinabad railroad station. They did so to avoid working with "Tadzhtrans," which had been responsible for loading and off-loading at the Stalinabad railway station since 1933. Enterprises awaiting cargo instead employed their own couriers to hire a car or other unplanned transport.[197] The unofficial nature of shipping operations was no secret. Maksumov even appealed to freightage workers in his speech in hopes of inspiring more legal practices. He called on them to stop engaging in corrupt practices, including improvised services and stealing.[198] Laborers and their managers on both sides, he stated, were to

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[194] Speech to the evening session of the discussion of reports from Tadzhiktorg/Tadzhikmatlubot, transcript with handwritten redactions, attributed to Maksumov (Deputy Chair of SNK), 1935, TsGART, f. 18, Maksumov (Deputy Chair of SNK), d. 1274, ll. 109-110 (full document is ll. 106-122).

[195] Record of proceedings of the 15 January 1935 interdepartmental meeting with Comrade Perskii, the SNK Tajik SSR Consultant on Transportation, signed by Perskii (Chairman), TsGART, f. 18, op. 1, d. 931, ll. 132-134.

[196] Report "on the organization and preparation of construction in 1936," copy, addressed to Shadunts (Secretary of Central Committee of the KP Tajik SSR), and Rakhimbaev (Chairman of the SNK Tajik SSR) and Kaktyn' (Deputy Chairman of the SNK Tajik SSR), signed by Dubrovitskii (Deputy People's Commissar of Public Services of the Tajik SSR), 21 November 1936, TsGART, f. 18, op. 1, d. 1140, ll. 8-11 (full document is ll. 6-14).

[197] Report addressed to Kaktyn' (SNK Tajik SSR), signed by Vagarshak Karamov (Director of the TGDT), 4 May 1935, TsGART, f. 18, op. 1, d. 1138, ll. 43-44 (full document).

[198] TsGART, f. 18, op. 1, d. 1274, ll. 112, 116-117.

operate according to planned relations, and observe government set prices. Even so, he also acknowledged that many of them were simply operating according to older norms of transaction within the aspiring planned "command economy." Many of the personnel of especially client agencies still had not become accustomed to "not negotiating [the prices] for goods." Good Soviet laborers follow the rules, Maksumov explained, so "take what they give you, and say thank you."[199] His negotiating tone, however, reflected that authorities like him were not resolved to end unofficial practices in shipping. The way freightage operated was intrinsic to the way that commodity chains and the larger economy of Tajikistan functioned.

A consequence of the persistence and importance of markets to shipping operations within commodity chains was the normalization of shortages and competition for goods among economic enterprises, and related outcomes such as wasted, spoiled, and lost cargo.[200] This situation also led to the the de facto special status of shipping organizations. In 1935, for example, the Commissar of Finance complained that "a basic transportation organization like Tadzh[dor]trans [still] has no budget that is then reviewed by Gosplan and approved by higher organizations. The trust governs itself."[201] Larger economic problems persisted too. For its part, Tadzhdortrans could claim significant, continuing material challenges. Some were self-evident challenges in the physical environment that agencies of Tajikistan had become accustomed to finding fault in. Shipping organizations could blame seasonal roads access problems of the fall and spring for the shortages of bricks, alabaster, and nails for school construction in Kulob,

[199] TsGART, f. 18, op. 1, d. 1274, l. 112.

[200] See, for example, Message addressed to Molotov (STO) and Andreev (NKPS) in Moscow, copy attributed to Maksimov (Deputy Chairman of SNK Tajik SSR), 2 February 1935, TsGART, f. 18, op. 1, d. 931, l. 2 (full document).

[201] Message to the SNK Tajik SSR, copy no. 0692, attributed to Shalimov (People's Commissar of Finance in the Tajik SSR) and Ginzburg (Economic Sector), 1 June 1935, TsGART, f. 18, op. 1, d. 950, l. 1 (full document).

Kyzyl-Mazar, and other regions.[202] Remoteness of settlements was also a continuing challenge to shipping and economic growth in Tajikistan throughout the decade. In 1935, cereal exports were restricted to the period between June and October, as SNK Chairman Rakhimbaev explained. "During the winter, when the best form of transport—sledding—is used in central regions of the Union, our roads are entirely closed to transit."[203]

Improved infrastructure and accumulation of capital that facilitated greater mobility and economic capacity also led to new problems that contributed to a situation where daily improvisation in shipping supported construction and larger goals. As I discuss in Chapter 5, following the confusing history of improvised freightage can lead to a ground-level, operation-based understanding of not only how things were done, but also what projects succeeded while others failed in the making of economy and regions. So, while more laborers and means of mobility were imported to Tajikistan, the scale of production and logistical challenges also increased. Transportation capacity remained strained. In 1934, the small window of time during which mass transportation could connect more remote regions of the republic to mobility resources, 150 automobiles, 300 carts, and "more than 8,000 heads of pack animal transport" were mobilized at the expense of ongoing work in several agricultural sectors.[204] As I will

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[202] Supplement to oral report on the state of school construction, addressed to the Comrade Rakhimbaev (Chairman of the SNK TajikSSR), no. 127, signed by Dubrovitskii (Deputy People's Commissar of Public Services of the Tajik SSR), 28 June 1935, TsGART, f. 18, op. 1, d. 1142, ll. 27-28 (full document is ll. 27-31); Report addressed to the Comrade Rakhimbaev (Chairman of the SNK Tajik SSR), no. 109, signed by Tashripov (People's Commissar of Public Services of the Tajik SSR) and Tursun-Khojaev (Deputy Administrator of the Zhilkomstroi Trust), 25 June 1935, TsGART, f. 18, op. 1, d. 1142, ll. 36-39 (full document); and Report "on the financial situation of the Zhilkomstroi trust," addressed to the Comrade Rakhimbaev (Chairman of the SNK Tajik SSR), no. 131, signed by Dubrovitskii (Deputy People's Commissar of Public Services of the Tajik SSR) and Gal'perin (Deputy Director of the Zhilkomstroi Administration of NKKKh Tajik SSR), [illegible] 1935, TsGART, f. 18, op. 1, d. 1142, ll. 40-42 (full document).

[203] Message to Comrade Molotov (Chairman of the SNK USSR) and Comrade Kleiner (Chairman of the Committee for Procurements under the SNK USSR), copy attributed to Rakhimbaev (Chairman of the SNK Tajik SSR), n. d. (1935), TsGART, f. 18, op. 1, d. 931, l. 176 (full document is ll. 176-181).

[204] TsGART, f. 18, op. 1, d. 931, ll. 176-177.

discuss in the next chapter, animals commonly dominated cargo hauling, adding another environmental dimension to the management of economic modernization in the republic. Such problems persisted into at least the end of the 1930s, when growing productivity still outpaced freightage ability. In 1937, storage and transportation capacity were a massive concern of SNK Tajik SSR and its all-Union counterpart. Rakhimbaev explained that "the Kulob group of regions in the Tajik SSR (Kulob, Kyzyl-Mazar, Kolkhozobod, and Dzerzhinskii MTS) is isolated from others for a significant period (fall to spring) [when] contact by automobile transportation closes."[205]

The seemingly simple act of transferring cargo from one enterprise to another, and from one place to another, was wrought with complications that highlight the profound contingency of economic growth in Soviet Tajikistan, and elsewhere. Though the material capacity of the Soviet state in Tajikistan had changed considerably, many trans-Soviet logistical problems persisted. Information management across the USSR was considerably better, though data for Tajikistan was still poor. Central planners produced big-picture statements about timber passage on Soviet railroads, where information about Central Asian traffic volume and destinations was mostly absent.[206]

Measurable change in system effectiveness did occur in central Russia, taking some pressure of Tajikistan couriers who normally sought out capital closer to Moscow. By 1937, logistical planning on west-Siberian railroads for the transport of timber to Tajikistan was much more detailed and organized, and audits were much more successful. Because of concurrently

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[205] Message to Rudzutak (Deputy to the Chairman of the SNK USSR), copy attributed to Rakhimbaev (Chairman of the SNK TajikSSR), n.d. (1937), TsGART, f. 18, op. 1, d. 1777, ll. 24-26 (full document).

[206] Notably, footnotes were sometimes inserted into monthly tables to note the number of empty wagons believed to be in operation on these railroads daily—serving (apparently) all of the Central Asian republics. TsGART, f. 18, op. 1, d. 950, ll. 16-19, 69-72.

growing needs of the republic's economy, though, the execution of planning was still an absolute failure from the perspective of Tadzhiksnabsbyt. In March, for example—the most successful of the spring months—only 131 of an expected 475 wagons of timber arrived from their sources on the Tomsk, Kranoiarsk, and Kuibyshev railroads of Siberia. As much half of the timber delivered to Tajikistan was still sourced in the central regions of Russia, however.[207] Tajikistan's experience, in the 1920s and 1930s, of depending on the timber supply for its built environment demonstrates the degree to which the Soviet state was founded on material exchange.

I have argued that the practices that supported the cargo flows undergirding economic growth were unplanned, ad hoc activities that do not conform to prevailing historiographical characterizations of the Soviet economy as centrally commanded. In practical terms, economic officials and enterprises were responsible for ensuring that commodities arrived. Overcoming a large host of unpredictable factors and parties that could intersect and interfere with their endeavors in the vast space between Moscow and Tajikistan, as well as the smaller ones among its settlements and work sites. Soviet commodity chains and the exchange of fundamental capital like timber and labor were contingent on great physical exercises of improvised cooperation. I think that further study of the day-to-day operations of commodity chains across the USSR can promote better understanding of the specific reasons for capital flows and shortages. It is a way of addressing the profound, physical connectedness of Soviet regions while acknowledging space, legacy, and wealth that separated them.

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[207] Fact sheet "on planned deliveries of timber products by wagon to the Tajik SSR in 1937," signed by Atabaev (Administrator of Tadzhiksnabsbyt), n.d. TsGART, f. 18, op. 1, d. 1777, l. 5 (full document); Message addressed to Kaganovich (NKPS in Moscow), copy attributed to Rakhimbaev (Chairman of the SNK Tajik SSR), 16 March 1937, TsGART, f. 18, op. 1, d. 1777, l. 6 (full document); Message addressed to Molotov (SNK in Moscow), copy attributed to Maksumov (Deputy Chairman of the SNK Tajik SSR), 9 April 1937, TsGART, f. 18, op. 1, d. 1777, l. 7 (full document); and Message addressed to Molotov (SNK in Moscow), copy attributed to Maksumov (Deputy Chairman of the SNK Tajik SSR), 14 March 1937, TsGART, f. 18, op. 1, d. 1777, l. 8 (full document).

CHAPTER 4

SOVIET MODERNIZATION: THE HORSES AND CAMELS OF THE TAJIK SSR

"Naturally, Central Asia is in need of fast, reliable, and economical transportation, which specifically is automotive transportation." So began a 1926 report on the state of automotive mobility submitted to a "Conference on the Study of the Productive Forces of Central Asia." The document outlined the current state of machine transportation in the region, how it differed from that in the rest of the USSR, and explained why its authors believed more motorized vehicles were needed. The central argument connected mechanized road mobility to the strongest global economies, particularly "in the life of governments of western Europe and America."[1] Acquiring and using machines, however, was no easy matter. Motorized vehicles of all sorts were by and large imported from prosperous countries that also produced them. The wealthiest states were an important material as well as ideological point of reference for Soviet officials concerned with the relationship between transportation and economic growth ambitions throughout the USSR.

This chapter analyzes the role that means of mobility played in Tajikistan during the ensuing decade of societal change. I will demonstrate that there was nothing "natural" about the need for motorized vehicles, and that using them was often the slower, less reliable, and more expensive option for moving goods or people on this particular terrain in the 1920s and 1930s. Often, the use of machines was not even possible, and for various reasons. Accordingly, this chapter analyzes the contribution of animal transportation—particularly of horses and camels—

[1] Report addressed to the Conference on the Study of the Productive Forces of Central Asia," attributed to the engineer Leiderman, Head of Automotive Parts division of SAZOMES, April 1926, in Tashkent, Russian State Archive of the Economy (*Rossiiskii gosudarstvennyi arkhiv ekonomiki;* hereafter RGAE), f. 1884 (People's Commissariat/Ministry of Ways of Communication of the USSR), op. 41, d. 368, l. 16b (full document is ll. 16b-9b). Inverted pagination in archival citations reflects the original pagination in the files themselves.

along with that of trucks and tractors. I will show that the Soviet regime's desire for a particular form of productive society on an abstract, global model of mobility was not—and could not be—implemented in Tajikistan because of its specific landscape. Economic authorities pursued modernization in this republic by using familiar, non-mechanized means of movement within the limits of material legacy and possibility.

Few Soviet officials involved in managing Tajikistan's or Central Asia's economies had any illusions about the ease with which a revolution in transportation could be rapidly implemented to change local society. Their assessments of how these regions, and even the entire USSR, corresponded to rich-world models of economic growth in the 1920 and 1930s led them to believe that the peculiar conditions of the new socialist state presented as much of a natural *obstacle* as a natural *need*. As the 1926 report pointed out, "modern, standard automotive construction in western Europe and America does not make the kind of machine that would fully satisfy the working conditions of the USSR, and specifically in [the republics of] Central Asia." To the author, the problem was that foreign machines were made for the built and natural environments in which they were produced. "And since no state with a developed automotive industry has road conditions as bad as we do, it follows that it is hard to find a suitable machine among them." Machines would still be sourced abroad, but "in order to obtain an appropriate machine, it is necessary to make a special order specifying distinct norms drawn up by us."[2] While the USSR and Central Asia imported many machines over the coming decade and-a-half, I am not aware of any such requests. The statement, however, demonstrated that Soviet officials endeavored to translate modern sciences and aspirations for mobility into a form that suited their own land.

[2] RGAE, f. 1884, op. 41, d. 368, l. 10b.

As they worked to create new transportation infrastructure in Tajikistan, they used available forms of mobility in a way that accommodated the republic's physical environment. I explained in earlier chapters that officials often found pack and draft animals were the means of movement best endowed to navigate the territory's routes, some of which were not at all passable by mechanized or non-mechanized vehicles. In this chapter, I argue that Soviet modernization of the use of horses and camels served economic growth. This view is based on the way that agencies endeavored to increase animal capacity in movement through methods of mass mobilization and production, as well as technological control. Soviet officials furthermore used the modern practice of breeding to adapt these living means of mobility to the republic's terrain. Breeding allowed the environmental management state to identify, multiply, and enhance characteristics of its animals that made them better able to navigate native material legacy while growing their numberss. Modernization in Tajikistan, as elsewhere, was an endeavor that prized machine transportation, but was characterized more by that of ungulates.

This chapter considers the history of economic life in the early Tajik SSR from the perspective of modern horses and camels. The republic's dependence on growing numbers of working animals was similar to the rapidly growing economies of the modern era, where a sharp rise in the use of especially draft horses accompanied the proliferation of railroads, steam-powered ships, and urbanization. In much of nineteenth century Europe and North America, horses were primarily used for economic purposes in freight or human transportation (by cart or wagon) beyond the railroad, as well as in construction (hoisting, dock and harbor work)—and comparatively little in horseback riding, contrary to common assumptions.[3] Beasts in

[3] Joel A. Tarr and Clay McShane, "The Horse as an Urban Technology," *Journal of Urban Technology* 15, no. 1 (2008): 6-9; and Ann Norton Greene, *Horses at Work: Harnessing Power in Industrial America* (Cambridge: Harvard University Press, 2008), 1-3.

modernizing historical contexts were treated much like machines.[4]

My emphasis on the material context leads me to a very different analysis from most studies of animals as objects of modernity. These prioritize cultural interpretation of beasts, whether by scholars or historical actors. Humanistic examination of animals in the Soviet Union and elsewhere tends to reflect a broader scholarly understanding that relegates them to rapidly decreasing economic significance when automotive vehicles became more common at the turn of the twentieth century. Studies that model modernity in economic life of the rich world, in particular, perpetuate the view that motorized vehicles came to rapidly and decisively dominate transportation during the interwar period, though this did not happen in most other regions.[5] The study of animals as linguistic and visual symbols also often perpetuates such perspectives because culture often reflected anxieties and ambitions rather than the material realities of the majority of the global population.[6] Late imperial Russian cultural expressions already associated horses and other animals with an unchanging, idyllic village life, opposite to the perpetual uncertainties of a modernizing and urbanizing world—even though this too was characterized by ubiquitous animal labor. This kind of understanding found various artful and popular iterations throughout the twentieth century in the USSR.[7] It also leant ways of considering the animals of history in a way that John T. Coleman argues "reveals the human politics of animal knowledge…the contests people [in historical contexts] wage to assert their definitions and

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[4] Tarr and McShane, "The Horse," 9-14.

[5] See Tarr and McShane "The Horse." In fact, many scholars see this as a break in human-animal relations that resulted from the growth of capitalism. See Jonathan Burt, "John Berger's 'Why Look at Animals?' A Close Reading," *Worldviews* 9, no. 2 (2005): 206.

[6] Burt, "John Berger's 'Why Look at Animals?' A Close Reading," 203-18.

[7] See, for example, Arja Rosenholm, "Of Men and Horses: Animal Imagery and the Construction of Russian Modernities," in *Other Animals: Beyond the Human in Russian Culture and History*, ed. Jane Costlow and Amy Nelson (Pittsburgh: Univeristy of Pittsburgh Press, 2010), 186.

categories."[8] Sarah Whatmore, however, cautions that privileging such cultural approaches over others often "serves primarily to reaffirm intellectual prejudices and identities."[9] I show that modern use of animals in Tajikistan was different from other places because of the region's distinct physical environment.

The cultural representations privileged in the existing scholarship on animals universalize visions of modernity through frames of interpretation that ignore regional specificity, and which assume homogenous dynamics of historical material change. Ann Norton Greene observes, for example, that despite US society's desire for the automobile at the turn-of-the-century "the transition from animal to automotive power would prove to be gradual, complicated, and troubling. Assertions of its inevitability are misleading and irrelevant."[10] So too are such claims about the changing technology of the USSR, where draft animals were often crucial to small-scale transportation throughout its history.[11] Soviet officials in Tajikistan would have preferred to use machines, but two factors prevented them from doing so to the extent desired: first, an absolute shortage of machines, and the need to import them from elsewhere in the USSR; and, second, the limited usefulness of automotive vehicles on the contemporary landscape of Tajikistan. The republic's experience shows the importance of also considering the environmental challenges to animals acting according to human intention. But this case diverges from Greene's portrayal of the American story. She argues that the push to prioritize machine

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[8] Jon T. Coleman, "Two by Two: Bringing Animals into American History," *Reviews in American History* 33, no. 4 (December 2005): 481-92.

[9] Sarah Whatmore, "Hybrid Geographies: Rethinking the 'Human' in Human Geography," *The Animals Reader: The Essential Classic and Contemporary Writings*, ed. Linda Kalof and Amy Fitzgerald (Oxford, UK: Berg, 2007), 337, 338.

[10] Ann Norton Greene, *Horses at Work: Harnessing Power in Industrial America* (Cambridge: Harvard University Press, 2008), 274.

[11] Richard W. Bulliet, *The Camel and the Wheel* (Cambridge: Harvard University Press, 1975), 177.

transportation over animals was "the result of cultural choices made about energy consumption at the turn of the century."[12] Though the Soviet move to foreign models of modern in mobility also involved culturally-informed decisions, the assertion does not explain why draft animals were used more than machines in southern Tajikistan, and how their labor supported economic growth in the republic.

I show that horses and camels were crucial tools of modernization for the Soviet environmental management state. In so doing, I also demonstrate the usefulness of extending such analysis to economic life of other socialist and global regions. What was the degree of correspondence between politics and reality in discussions about modernizing mobility? What do we learn from studying the beasts of the history of productivity? By illuminating animal participation in humans' endeavors, I furthermore portray the experience and scale of mobility in early Soviet Tajikistan that was sometimes unique to beasts and other times shared with their masters. The presence of so many horses and camels among humans who were also malnourished and over-worked, anxious, and in perpetual motion, implies a world of sounds, smells, and physical contact that is a window on the character of toil in the new republic. Even though my sources provide little of this kind of detail, they shed light on a transportation workscape inhabited by subalterns.[13] This chapter engages the constant labor and migration that animals were subjected to in conditions of insecure food and shelter. The sheer number of ungulates—many thousands—was itself illustrative of the scope and intensity of their activity in Tajikistan. Because working animals were used in virtually all sectors, my research touches

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[12] Ann Norton Greene, *Horses at Work: Harnessing Power in Industrial America* (Cambridge: Harvard University Press, 2008), 274.

[13] On the study of animals as an opportunity to access subaltern experience, see Sandra Swart, "'The World that Horses Made": A South African Case Study of Writing Animals into Social History," *Internationaal Instituut voor Sociale Geschiedenis* 55 (2010): 248-50.

briefly on topics that are still rarely discussed in Central Asian studies, including the presence of the military and police, institutions dependent on horses for transportation beyond machine navigable roads.[14] My juxtaposition of animal and automotive vehicle labor in the service of modernization as a rich-world model of economic growth provides a picture of daily challenges and possibilities.

The institutionalization of draft animal breeding in Tajikistan put the Soviet state in a position to manage two legacies of the physical environment in the pursuit of economic growth. First, the production of horses and camels at home made the republic less dependent on imports of means of mobility from other parts of the USSR. Second, a larger, stable supply of animals would help the state accommodate and exploit a landscape of mobility that did not yet conform to its desired platform for automotive vehicles. This chapter analyses these two factors, examining different experiences associated with introducing machines and masses of ungulates offered to Tajikistan, and the different challenges to each form of mobility. The chapter then proceeds with a discussion of how modern camel and horse breeding allowed the state to overcome various challenges associated with both the terrain and with reliance on foreign commodity chains.

A landscape for animals

Animals and machines were both closely involved in the work of altering the physical environment of Tajikistan to support shipping operations and economic growth. Officials

[14] On the importance of animals in policing in norther regions of Central Asia, see, for example, Sarah Isabel Cameron, "The Hungry Steppe: Soviet Kazakhstan and the Kazakh Famine, 1921-1934" (PhD diss., Yale University, 2010), 152.

considered them in surveys and assessments of possibility for construction, and used them to test infrastructure. In general, they concluded that the economics of managing this environment meant that animal transportation was the better short-term option on most routes. Moreover, at the same time that camels and horses shaped the landscape of Tajikistan through their mobility, they also defined networks of movement through their increasingly large presence. This section analyzes how dynamics of importing of means of motion impacted the physical environment, and contributed to a desire for producing horses and camels within the republic.

The exact number of ungulates and automotive vehicles present in Tajikistan in the mid-1920s is unknown, and there is probably no way to know it. As I noted in Chapter 2, the first ever automotive vehicle in the republic arrived in late 1925, but just for a visit. Meanwhile, Tajik ASSR officials avoided studying the actual numbers of working animals within their borders out of concern for stability. As peace returned to the land in 1927, the number rose, but SNK authorities felt that conducting a census of horses would lead native residents to feel their livestock was at risk of being stolen.[15] Horses had often been confiscated in the preceding years of revolution and war, and their populations decreased as the economy collapsed. In fact, animal holdings throughout all of formerly Russian Central Asia were devastated. According to one estimate, the total number of horses in Turkestan dropped from 2,063,300 in 1914 to 672,000 in 1920.[16] By 1926, that population dropped even farther to 226,000.[17] Although the number of

[15] Resolution no. 1 of the record of proceedings of the 4 Dec 1927 meeting of the SNK of the Tajik ASSR on the question of "delivery of horses, wagon train, and related gear to the army on the republic's territory should they be mobilized," secret, Central State Archive of the Republic of Tajikistan (*Tsentral'nyi gosudarstvennyi arkhiv respubliki Tadzhikistan*; hereafter TsGART), f. 17 (Council of People's Commissars of the Tajik ASSR, 1926-1929), op. 3, d. 12, l. 1 (full document).

[16] "Long-term plan for Horse Breeding in the Turkestan Republic for the Five Years of 1924-1928," RGAE, f. 4372 (State Planning Committee of the USSR), op. 15, d. 452, ll. 26b-a (full document is ll. 26b-7b).

[17] The figure refers to much of Central Asia, but it it hard to be sure: the report cited accounted for "Turkestan" in 1924, though it included regions of Bukhara, and also projected figures for the region up to 1928. Its author may not

draft animals was far larger than the 360 "automotive units" present in Central Asia that year, the trend among machines was opposite: their number had actually grown significantly. Officials estimated that, at the start of World War I, as few as a dozen automobiles were present in the whole region.[18]

The scarcity of means of mobility—whether living or mechanized—in Central Asia was a great concern to officials administering shipping organizations. Their anxiety over the small holdings of Tajikistan on the eve of independence reflected the weakness of the Soviet state through its lacking ability to manage movement. Some officials went so far as to recommend postponing the NTD process that would split institutions currently shared with, and based in, Uzbekistan. Doing so, a Tajik ASSR representative argued in the summer of 1929, would allow time for appropriate material preparations to be made within a shipping organization called Uzavtopromtorg that currently used 86 machines to serve both republics. He explained that "the delimitation of Avtropromtorg of Uzbekistan and Tajikistan now [will leave] Tajikistan in a worse situation." The portion of the fleet that was to be given to Tajikistan comprised vehicles that were older, "almost exhausted units." The official identified various problems I covered in earlier chapters. He anticipated many months of delays in the anticipated arrival of new units due to commodity chain problems. Meanwhile, the physical environment would complicate their delivery—the coming winter would inhibit arrival, and a deficit of constructed and stocked garages would challenge capacity for machine maintenance. The key problem was that "for Tadzhikavtopromtorg, the period of the delimitation will begin right at the start the dead period

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have understood the implications of contemporary delimitation negotiations taking place. See RGAE, f. 4372, op. 15, d. 452, ll. 19b-a.

[18] RGAE, f. 1884, op. 41, d. 368, l. 14b.

of November to March, i.e. at the moment when mobility stops [in December]."[19] Tajikistan faced similar challenges to its animal stock when it became independent. It continued receiving donations of horses from Uzbekistan that were explicitly related to the NTD for at least up to a year.[20]

Tajikistan's dependency on the rest of the USSR for means of mobility meant relying on foreign sources for the capacity to conduct cargo transportation within its own borders. As I showed in Chapter 3, central plans for satisfying the republic's projected transportation and other needs would never function as wanted or expected. Using and sharing the mobility resources of the republic was a complex management problem that exacerbated operational stresses within the Tajik SSR related to the allocation of transportation capital, whose managers often shared with several organizations. Some of these secondary users accused others of unpredictably taking and using machines. Transzemstroi's rightful use of a truck, for example, was twice interrupted in March 1930 when two other organizations, on separate occasions, borrowed it without announcement, and left no notice of where they left it later.[21] Elsewhere in southern Tajikistan, a frustrated Narkomtorg official complained that artels misallocated animals and cargos. "Along the road from Kulob, I came across around 100 camels and several carts, carrying canvas…[rather than] tools for cotton production."[22] The market for shipping here ignored a

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[19] Message addressed to Comrade Sluchak (Deputy Chairman of SNK Taj ASSR), attributed to Schastnev (Deputy Representative of the Taj ASSR to the UzSSR, on 14 August 1929 (filed on 19 September 1929 (noted as having been sent by telegraph), "secret-personal," TsGART, f. 17, op. 3, d. 42, ll. 11, 12 (full document is ll. 10-12).

[20] Extract from the record of proceedings of the 5-6 March 1930 meeting of the Central Asian Regional Committee for Freightage in Tashkent, attributed to Lavrov (Chairman) and Bukin (Secretary), TsGART, f. 146 (Permanent Representation of the Tajik SSR to the Central Asian Economic Council in Tashkent, October 1929-January 1935), op. 1, d. 78, ll. 126-127 (full document is ll. 125-127).

[21] Note addressed to TGDT and other organizations, attributed to Korkhavin (Foreman) and Sviderskii (Deputy KP Rep) of Tranzemstroi, 3 April 1930, TsGART, f. 18 (Council of People's Commissars of the Tajik SSR, 1929-1939), op. 1, d. 102, l. 180 (full document).

[22] Message addressed to Comrade Sluchak (Deputy Chairman of the SNK Tajik SSR), attributed to Narkomtorg, signed by Shevtsov, 6 August 1930, TsGART, f. 18, op. 1, d. 182, l. 194 (full document).

complicated official schedule that SNK officials tried to restore by message from Stalinabad. "Camel transport that has carried grains from Kulob to Qurghonteppa should be used to transport manufactured goods from Sarai-Kamar."[23]

Since transportation resources were shared across organizations, planning services for them were complicated, and involved understanding how to adjust for continuous shortages. For example, the Deputy Director of the Vakhsh Group of Sovkhozes' budget report of 1931 endeavored to estimate labor hours per kilometer of 1.5 ton trucks, but he did so on the assumption he would receive a large number. The collectives he managed needed fifty of these machines for heavy-duty shipping, but they presently had only five. This situation was even worse when it came to "intra-economic conveyance," which he estimated would require 350 horses. The 198 horses that the Sovkhoz group currently used in such transportation were actually meant for field work, but would be shared with transportation if the number requested did not arrive.[24]

The number of horses desired may have seemed reasonable because animals were easier to acquire than machines. Horses, mules, and camels were sourced in Central Asia, closer to Tajikistan than automotive vehicles coming from Russia. Republican agencies could deploy couriers to seek draft animals in places as diverse and distant as Baku, Bek-Budi, Ashkhabad, Tashkent, and Andijan, all in one trip.[25] The necessity of using unofficial means to acquire the

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[23] Message addressed to Comrade Goffer (Soiuztrans), copied to Comrade Shevtsov of Narkomtorg), attributed to Sluchat (Deputy Chairman of SNK Tajik SSR), 8 August 1930, TsGART, f. 18, op. 1, d. 182, l. 193 (full document). Sarai-Kamar is presently referred to as Panj.

[24] Message addressed to the Transport Section of Gosplan Tajik SSR, attributed to Petrov (Deputy Director of the Office of the Vakhsh Group of Sovkhozes) and Koval'chyk (Secretary) on behalf of the Cotton Sovkhoz No. 6 (aka "Khloposovkhoz"), 10 May 1931, TsGART, f. 18, op. 1, d. 216, l. 273 (full document).

[25] Record of proceedings no. 32 of a 10 December 1930 meeting of the Management Board of Promkooptrans of the Tajik SSR, signed by Fazilov (Chair) and Ivashchenko (Secretary), TsGART, f. 93 (Producer's Transportation Cooperative Union of the Tajik SSR), op. 1, d. 14, ll. 136-39 (full document).

needed units, though, did not increase the certainty that they would arrive. In April 1930, a Tajik SSR organization sent "our agents" to various locations in order to "contract and purchase" up to a total of 2,500 horses from the Turksib operations that were winding down.[26] These agents informed Stalinabad that despite a surplus of carts, local authorities obstructed purchases and exports.[27]

Part of the reason for such non-cooperation was that animals had also been very important to transportation throughout Central Asia in the recent past. The transportation infrastructure of all the regional republics had been severely damaged in the post-tsarist period. Because of the combination of a lack of automotive vehicles and poor roads, working horses were the primary means of transportation while infrastructure was repaired.[28] Animals were also a more expedient tool of shipping in Uzbekistan, but the legacy of its physical environment was very different from Tajikistan, where conditions meant that the dirt road from Termez to Dushanbe that preceded the railroad was primarily traveled by pack and draft animals. Its quality was so low that military-grade trucks sometimes took two days to travel its distance of 250-300 kilometers.[29] Uzbekistan's land was far flatter on the whole, and had more roads to begin with. Foreign officials often lacked awareness of such differences, and it led to problems involving external management of Tajikistan's internal transportation. In 1928, for example, SNK officials

[26] TsGART, f. 18, op. 1, d. 102, l. 209.

[27] TsGART, f. 18, op. 1, d. 102, l. 209.

[28] Message addressed to the Central Asian Section of Gosplan of the USSR (Copied to Narkomzem), attributed to the Presidium of the Economic Council of the Central Asian Republics, 5 October 1924, RGAE, f. 4372, op. 15, d. 452, l. 37 (full document); "Report on regional transportation to the conference on the study of productive forces of Central Asia," attributed to Pospelov, Engineer and Head of the Central Asian Regional Transport Section of NKPS, 20 April 1926, RGAE, f. 1884, op. 41, d. 368, ll. 37a-b (full document is ll. 38b-18b); and RGAE, f. 1884, op. 41, d. 368, l. 15b.

[29] RGAE, f. 1884, op. 41, d. 368, l. 14a; Internal report on camel transportation from Guzar to Dushanbe, handwritten, 29 June 1925 (Received 23 July), no attribution, TsGART, f. 19, op. 1, d. 496, ll. 24a-b (full document); and TsGART, f. 19 (State Planning Committee of the Tajik ASSR, 1925-1929), op. 1, d. 506, ll. 30-34.

of the Tajik ASSR lamented that an agency called Transport, based in Uzbekistan, "was unable to properly undertake the organization of freightage in Tajikistan" because its planning was administrative, and assumed conditions of movement would be similar to that of Uzbekistan. Not having considered the orographic and climactic peculiarities of the country, Transport was "unable to fulfill its contracts with economic organizations, which resulted in an interruption in the planned work."[30]

Accommodating this reality of mobility had urgent relevance to wider projects for economic growth in Tajikistan. I already discussed in Chapters 2 and 3 that animal paths were preferred for many routes where the territory posed too great a challenge to timely construction of higher capacity grades. A central challenge of managing transportation was the ability to anticipate the correspondence of means of mobility to the reliability and quality of roads. Smooth, easily navigable roads were a necessary improvement of the modern era. They promote economical transportation because they minimize wear to machines, or injury to animals, and maximize speed.[31] Movement on infrastructure that was lacking or in need of repair could have counter-productive implications for state investments across economic sectors and, most urgently, shipping. But the opposite was also true. As idealized and powerful as machines were, they were more demanding of their terrains than animals. Automotive vehicles were more likely to destroy new roads, while beasts instead tended to be vulnerable to the effects of poorly built or

[30] Here, the joint-stock company "Transport" reported that it took on the reponsibility accorded by "EKOSO" to be responsible for transportation "on the territory of Tajikistan." And it made a priority of "concluding contracts" with economic organizations in order to execute its duties. See Message addressed to Central Asian Economic Council in Tashkent, absolutely secret, attributed to Melkumov (Deputy Chair of the SNK Tajik ASSR) and Porokhin (Deputy of the Secret Section and Secretary of the SNK Tajik ASSR), 7 February 1928, TsGART, f. 17 (Council of People's Commissars of the Tajik ASSR, 1926-1929), op. 3, d. 9, l. 3 (full document).

[31] Clay McShane and Joel A. Tarr, *The Horse in the City: Living Machines in the Nineteenth Century* (Baltimore: Johns Hopkins University Press, 2007), 14.

damaged routes. The different relationships these forms of transportation had with the physical environment of early Tajikistan were part of what made its landscape unique.

A key consideration of planning new infrastructure building was to anticipate and avoid problems related to use by animals and machines. Bridges were a top concern since they often crossed water or other breaks in the terrain that were otherwise treacherous or impossible to maneuver around. In the fall of 1929, officials warned that delays in repair or construction of bridges traversing rivers in several important economic regions threatened ongoing projects, as well as means of motion. [32] Tadzhigosstroi officials, for example, demanded action on "our repeated memos" regarding the need to repair a structure over the intersection of the Dushanbe River and the Shakhmansur Canal. Their appeal included the usual warning that deferring this would resulted in stoppage of construction activities, but also emphasized dependence on horses and concern with their vitality. "The bridge is on the brink of total destruction, and horses run the risk of being crippled."[33]

Soviet officials endeavored to create infrastructure that was safe and passable, but they rarely made it useable by all forms of transportation. Though the ideal was that newly built routes would be increasingly used by automotive vehicles as they were imported to the republic, this was often simply not possible in Tajikistan. A conflict over tractors using dirt roads exemplified some of the consequences of idealized mobility encountering material reality. In

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[32] Message addressed to the SNK Tajik SSR, copied to Narkompromtorg and Tadzhdortrans, no. 1477, attributed to Kurochkin (Head of the Tajik Office of Uzavtopromtorg), 2 November 1929, TsGART, f. 18, op. 1, d. 102, l. 29 (full document); and Message addressed to Dadabaev (Tadzhikdortrans) and copied to Shadrin (Tadzhikkhlopok), attributed to Khojibaev (Predtsntroposevkoma) and Tomti (Secretary), received on 14 January 1930, TsGART, f. 18, op. 1, d. 102, l. 92 (full document).

[33] Message addressed to Gorkomkhoz, copied to RKI Tajik SSR, attributed to Naumov (Trust Director) and Dereviagin (Secretary) of Tajiki State Construction Trust (Tadzhikgosstroi), 20 October 1929, TsGART, f. 350 (People's Commissariat of the Workers' and Peasants' Inspectorate of the Tajik SSR, 1929-1932), op. 1, d. 62a, ll. 96a-b (full document).

October 1930, the director of a mill near the village of Shahrinau complained that tractors traversing his enterprise's estate were destroying his roads. He appealed to higher-level authorities because tractor drivers serving other economic projects felt entitled to disregard his protests and attempts to stop them. The official desire to modernize the economy of mobility made machines prestigious, and even gave their drivers an air of authority in daily transactions. So-called *traktoristy* felt entitled to using mill lands as a shortcut between refueling sites in fields nearby. The mill road may never have been intended to serve machines at all. This episode occurred during the first year of Tajikistan's independence, when officials were coming to terms with the need to adapt ideals to the limits of material possibility in daily operations. Often, machines could not travel roads that were built at the lowest cost and standard that made them passable. Although versatile vehicles like tractors might be able to traverse them, agencies sometimes restricted access because the weight and movement of machines was especially likely to disrupt surfaces. The mill director complained that the damage these machines did to his road and bridges in a single pass inhibited the travel of horse-drawn carts serving his venture.[34] Though the tractors threatened his entire enterprise, however, only when the mill obtained support of top officials did the tractors' management stop the trespassing.[35]

Machines also destroyed routes explicitly intended for them, and tractors were especially likely to do this because of their size and weight. These automotive vehicles were meant more for field work, though they also were sometimes employed in shipping, especially for particularly heavy cargo. Much of their road travel, though, happened because economic

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[34] Report addressed to the Manager of the Stroimaterial Trust, attributed to P. F. Kin'shakov (Director of the Khanaka Mill), 13 Oct 1930, TsGART, f. 18, op. 1, d. 102, l. 408a (full document is ll. 408a-b).

[35] Message addressed to the SNK Tajik SSR, attributed to Chudnov (Deputy Manager of Stroimaterial Trust) and Masteliak (Business Manager of Stroimaterial), received 16 Oct 1930, TsGART, f. 18, op. 1, d. 102, l. 407 (full document).

organizations in different locations shared them. In those situations, there was no alternative to machine passage, and the burden of the damage was transferred to road crews that were charged with repairing and rebuilding. In 1930, for example, SNK closed the southeasterly road from Stalinabad to the village of Danghara for over a month to allow Tadzhdortrans to repair it.[36] The immediate effects of tractor travel exposed ways that the road was poorly situated in the physical environment. Authorities also instructed the construction crew to seek alternate routes for certain legs to avoid the flood lands of the Tair-Su River and other particularly "serious obstacles to the passage of tractors."[37] Officials worried the tractors would themselves further damage the more southerly road through Sarai Kamar and Farkhor.[38]

Assessments of working animal routes often carried similar concerns about state investment in them as means of motion. Tajikistan's physical environment was an even greater danger to animals, especially when mobilized en masse for pack hauling, laden with heavy loads of cargo. As discussed in Chapters 1 and 2, however, the republic's roads were often built at the lowest standard in order to complete them as quickly as possible. The paths built for camels and horses were even lower quality because they traveled spaces that automotive vehicles might not go at all. Such surfaces created greater potential risk to the animals, and to the economies depending on them. The path from Iangi Bazar to Garm, for example, held up freightage operations of thousands of camels for much of 1930 and 1931.[39] Persistent problems with adequate supply of tens of thousands of rubles in credit and "cash money," equipment, and

[36] Message addressed to Oduch' (presumably of Tadzhdortrans), copied to Zernotrest, attributed to the Secretary of the committee for highways and dirt roads and automotive transportation of the SNK Tajik SSR, 5 Jan 1930, TsGART, f. 18, op. 1, d. 102, l. 96 (full document); and TsGART, f. 18, op. 1, d. 102, l. 93.

[37] TsGART, f. 18, op. 1, d. 102, l. 96.

[38] TsGART, f. 18, op. 1, d. 102, l. 94.

[39] TsGART, f. 18, op. 1, d. 102, l. 173.

laborers, delayed the work, and resulted in a very low quality path.[40] Although work on the Obi-Garm-Garm leg was completed on 10 June 1931, a subsequent assessment warned that it was not ready for mass travel.[41] Investigators recommended seemingly basic improvements to the trail: set bridges along the entire route; build gutters and drainage; "soften the profile of the serpentines [winding path] and rid them of collapsed portions"; clear the entire route of small, sharp stones and collapsed portions.[42] As in the case of modern, scientistic administrative language used to characterize challenges to road work that I discussed in earlier chapters, however, the solutions promoted for making the Obi-Garm to Garm route safer obscured the scale of danger that camels faced.

These assessments were based on the trial passage of 217 camels driven on the route. The experiment's economic significance was reflected in the fact that, upon arrival in Garm, the test group was held along with an outbound shipment of wheat pending resolution of the problems it experienced. The trial's importance was further signified by the large number of animals and investigators implicated, as well as by the detailed account of the challenges to camel travel. The trial group represented just a fraction of the thousands of camels that would normally make up caravans traveling the route. Meanwhile, no less than fourteen individuals participated in the

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[40] See Message addressed to Dadabaev (Director of TGDT), attributed to Sluchak, the deputy chair or SNK Tajik SSR, received on 24 September 1930, TsGART, f. 18, op. 1, d. 102, l. 373 (full document); and Message addressed to the Manager of Gosbank, copied to SNK Tajik SSR, attributed to TGDT, October 1930, TsGART, f. 18, op. 1, d. 102, l. 400 (full document).

[41] "Personal opinion" of the Assistant to the Foreman of the Obi-Garm-Garm Road project, TsGART, f. 18, op. 1, d. 216, ll. 340-341 (full document).

[42] Statement addressed to Soiuztrans, signed by members of an investigatory commission—being representatives of the GPU of the Obi-Garm RaiIspolkom, the Oblast office, Soiuztrans (Bogdanov), the Central Planting Committee, the 6th Garage Operations Zone (Liubman), Assistant Foreman of Dorstroi for the construction of the Obi-Garm to Garm Road, the Head of the Oblast Office Concerning Export of Grains, a Correspondent of *Kommunist Tadzhikistana*, and several representatives of the Caravan of 3000 Camels (Akhmat-Artukov, Abdul-Mengleev, Tair Klich, Sirkulov Adil' Aidabaev, Shabrait Uramov), 22 June 1931, TsGART, f. 18, op. 1, d. 216, l. 343 (full document is ll. 342-343).

test-run, including road construction officials, caravan drivers, and a newspaper representative. Their analysis indicated multiple, complicated dangers facing animals on this route. Inclines were a particular problem. On a winding section, the slope "causes difficulty to the ascent and descent of camel transportation."[43] Water was the greatest challenge, causing an array of dangers to the animals. Recent downpours had strewn large numbers of rocks and pebbles on the steep, winding part of the path that made walking cumbersome. These stones required clearing, and would likely be a problem again after more rain. To avoid similar problems, the investigators recommended that "the path from Obi-Garm to the serpentine [winding] descent before the second bridge requires gutters for dealing with runoff from springs in several places."[44] They faced a more complicated challenge where two fords crossed the Obi-Garm and Khoi-Dora Rivers. These, officials deemed, were unfit for camel travel because the estuary was "packed with sharp rocks, and the current is so fast that it rolls large rocks along the riverbed that crash into the camels' legs."[45] Their report concluded that the low quality of the route "and the subsequent damage by passing rains caused the unproductive standstill of 3,000 heads of camel, which threatens the transport of grains, and which already significantly interrupted the supply of equipment to Garm Okrug."[46]

Though challenges such as these were great, the establishment of good paths for animals were great, they represented a safer investment on the whole for state management of mobility. Animal paths were less complicated objects of construction and maintenance than those for mechanized vehicles. Moreover, beasts were easier to obtain from abroad. Administration of

[43] TsGART, f. 18, op. 1, d. 216, l. 342.
[44] TsGART, f. 18, op. 1, d. 216, l. 342.
[45] TsGART, f. 18, op. 1, d. 216, l. 342.
[46] TsGART, f. 18, op. 1, d. 216, l. 343.

animal acquisitions could be relatively specific about availability or approximate timelines. Officials organizing imports of machines were more often uncertain of what to expect from "union organs," and when.[47] This situation perpetuated a sense of helplessness among organizations needing or allotted machines by some level of administration. As I discuss in the next section, the transition to producing animals within the republic created an even greater disparity of ease of using animals in transportation by comparison with machines.

Modern animals for a modern economy

The establishment of working animal breeding as a formal institution of the Tajik SSR empowered the state to overcome the republic's physical legacy of remoteness and problematic mobility. Beginning in 1931, the establishment of Soviet stud farm No. 41 to supply the mountain cavalry initiated the process of naturalizing animal means of modern mobility in the republic. Having a growing domestic source of transportation helped Tajikistan grow less dependent on imports for its ability to communicate and distribute cargo between points. Furthermore, it represented a fundamental material change to the landscape of mobility. This section analyzes various ways that the institution of modern camel and horse breeding helped the Soviet state manage inherent challenges of Tajikistan's geography and terrain.

The establishment of such farms in Tajikistan was a major historical accomplishment that signified and anticipated successes in the advancement of economic modernization. Breeding pack and draft animals is a modern practice that became particularly successful and specialized in the Euro-American world of the nineteenth century, particularly in the case of horses. Equines

[47] See, for example, TsGART, f. 93, op. 1, d. 18, l. 3.

were altered through processes similar to technological innovation, which resulted in significant changes to their speed, strength, and size.[48] The appearance of farms for working animals therefore represented a major change in not only the nature of economic life in Tajikistan, but possibly also of Central Asia. The breeding of specialized domestic animals throughout this region historically had been practiced only locally and sporadically.[49] Imperial Russia established large-scale horse farms throughout colonial Central Asia, but these institutions collapsed before the Bolshevik Revolution, and Central Asia's horse stock declined significantly as a result. By the mid-1920s, key horse regions—concentrated in Kazakhstan and the major centers of Uzbekistan, in Tashkent, Bukhara, and Samarkand, and including one near Kyrgyzstan's lake Issyk Kul—were still recovering from years of social, political, and economic upheaval.[50] Their farms were in such dire financial condition that some resorted to supporting themselves with the revenues "from the selling of defective horses," which comprised around 10 percent of population.[51]

Tajikistan's horse farms provided the republic a degree of control over mobility that extended beyond the animals themselves. Modern use of pack and draft animals was a complicated affair involving large numbers of beasts that needed to be fed, and which were controlled with specialized tools and equipment. The presence of places where horses were concentrated for use locally by expert handlers meant that related supplies, even imported ones,

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[48] McShane and Tarr, *The Horse in the City*, 12.

[49] Anatoly M. Khazanov, *Nomads and the Outside World*, trans. Julia Crookenden, 2nd ed. (Madison: University of Wisconsin Press, 1994), 49.

[50] "Explanatory note on the long-term financial plan of the department of horse breeding of Narkomzem of the Turkestan Republic for the 5 years of 1924-1928," attributed to the Director of the Horse Breeding Department and the Director of the Special Section and the Economic Department, n.d. RGAE, f. 4372, op. 15, d. 452, ll. 36b-34a (full document).

[51] RGAE, f. 4372, op. 15, d. 452, l. 36b.

were more likely to be planned and accounted for, and available when needed. In fact, officials saw the growth of Stud-farm No. 41's herd from 93 to one of 2,262 in 1936 partly as a result of its home-grown expertise and self-sufficiency. Most of its 63 horse handlers had been with the institution since it was established. Moreover, its dedicated farming equipment—including 29 tractors, 3 combines, 3 threshers, 12 tractor hay mowers—enabled managers to grow most of the food it used on its own large parcel of land.[52]

Institutions like this clearly helped Tajikistan overcome the complications associated with the magnitude of its dependency on other regions. Acquiring working animals abroad was only one step towards productivity since animals did not necessarily arrive with the tools needed to manage them. All the usual problems of funding, planning, and logistics affected the importation of saddles, reins, rope, and other equipment.[53] Such tools, Sandra Swart points out, are modern implements of control that make it possible to exploit animal labor.[54] Thus, in the summer of 1931, Promkooptrans officials lamented their inability to use camels obtained in Turkmenistan and Kazakhstan. "From the moment they arrived, it turned out that it would be impossible to begin using them because of a lack of fodder, [related] equipment, saddles, rope, etc."[55]

The physical presence of institutions dedicated to animals also made it easier to provide for the general well-being of Tajikistan's herds. Animal illness and death in the republic was a constant concern to officials. The most significant cause was related to supplying fodder—

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[52] Report on "Stud-farms in the Tajik SSR," signed by S. Butovskii, 8 August 1936, TsGART, f. 18, op. 1, d. 1541, ll. 77-78 (full document).

[53] See, for example, Resolution no. 32 of the record of proceedings of a 10 December 1930 meeting of the Executive Board of Promkooptrans of the Tajik SSR, signed by Fazilov (Chair) and Ivashchenko (Secretary), TsGART, f. 93, op. 1, d. 14, ll. 136-39 (full document).

[54] Swart, "'The World that Horses Made," 251.

[55] "Hypotheses" addressed to the Tajik SSR Congress as part of report attributed to Promkooptrans, n.d. (mid-1931), TsGART, f. 18, op. 1, d. 216, l. 209 (full document).

especially acquiring it at all.[56] Commodity chain dysfunction, as I have shown, often led officials like animal handlers to seek feed in markets, such as informal bazars. Upper-level authorities were concerned that, besides the illegality of this practice, it also decreased the state's ability to control on the quality of food consumed by animals.[57] Although both horses and camels are hardy animals able to eat a variety of kinds of food, their work capacity is limited by the type and amount of fodder they receive. The freshness and nutrition of feed, meanwhile, could make beasts vulnerable to disease.[58] At times, concerns about fodder were so great that administrators even tried to delay the arrival of animal imports. In December 1930, the Promkooptrans executive resolved to try forestalling the arranged delivery of camels from Kazakhstan. They hoped these animals would not arrive before "the month of April 1931 in view of the fact that Tajikistan's roads (pack animal paths) are closed during the winter period, and we do not have any grass fodder for the sustenance of camels during the winter." These officials invoked a common rhetorical strategy, highlighting the two regions' differences, and even hypothesized that camels "can be at pasture during the entire winter in Kazakhstan."[59]

The stables and other housing of Tajikistan's growing farms also provided shelters, which encouraged the vitality of animal labor. This was a major development because, until at least the late 1930s, the state could scarcely even provide lodging to human capital. Historically, stables were a complicated logistical matter for organizations managing large groups of draft or pack animals. In the modern era, they became efficient stations that often also stored feed, spaces

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[56] See, for example, Record of proceedings of 27 November to 3 December 1930 meeting, TsGART, f. 93, op. 1, d. 14, l. 143 (full document).

[57] Message addressed to Aziakhleb, copied to SNK Tajik SSR, attributed to Dadabaev (Director of Tadzhdortrans) and Tsisizov (Secretary) on 15 November 1929 (received 18 November), TsGART, f. 18, op. 1, d. 102, l. 47 (full document).

[58] McShane and Tarr, *The Horse in the City*, 125-29, 144-48.

[59] TsGART, f. 93, op. 1, d. 14, l. 137.

for shoeing, and various equipment facilities. The multifarious nature of these complexes also, however, required sophisticated management and design to ensure, above all, cleanliness and fire safety.[60] Officials charged with building stables of Tajikistan—which were far more modest than the grand structures supporting Euro-American urbanization in the nineteenth century—warned that timber shortages resulted in small, less hygienic structures. They would encourage animal illness instead of supporting better health and economical transportation.[61]

Finally, the presence of farms in the republic also had a positive effect on the relationship to personnel. These institutions depended on the people who managed animals daily. Handlers were responsible for ensuring the health and safety of horses and camels, but prior to establishment of farms, such employees regularly harmed or killed their charges through neglect or abuse. Drovers made draft animals sick by working them too hard, by starving them, by beating them, or by keeping them in unsanitary conditions.[62] In early 1930, for example, members of the *Udarnik* artel at work in the Qurghonteppa region —settlers from "Siberia"— allegedly worked and neglected their horses to death. A Promkooptrans official reported that the shipping agents had killed seventeen horses in just one day. After completing a job, two of the animals died "in the road," while the remainder died in a "courtyard" meant for them to rest in.[63] Farms helped prevent such occurrences because they had clearer duties for employees, the state

[60] McShane and Tarr, *The Horse in the City*, 102-26.

[61] Message addressed to Narkomtorg, copied to SNK, the Construction Committee, GPU, attributed to Vizenkov (Manager of Soiuztrans Tajik SSR) and Minkarev (Construction Department), 3 June 1930, TsGART, f. 18, op. 1, d. 182, l. 81 (full document).

[62] See, for example, Message addressed to Promkooptrans, attributed to Health Officer, 3 June 1930, TsGART, f. 18, op. 1, d. 182, l. 83; and Record of proceedings of a 3 October 1930 organizational meeting of Promkooptrans, signed by Rakhkhe (Chair) and Krivonosob (Secretary), TsGART, f. 93, op. 1, d. 24, l. 8 (full document).

[63] See TsGART, f. 93, op. 1, d. 14, ll. 29a-b.

could better control them, and these personnel also had better access to the resources needed to do their jobs.

Farms also helped avoid the risks involved with handling the importation of animals. The act of shepherding large caravans between republics also commonly led to their demise as a result of poor handling. The botched importation of over 800 camels by train in 1932, for example, was judged an avoidable disaster. They received "so little attention," in the form of feeding or other care, "that 50 percent of them became sick during the trip." Of these, 200 died on the way or shortly after arrival. According to an official report, "dissection shows that all of them had rotten lungs." The camels had been destined for irrigation works in the Vakhsh River region. Only 300 of the remaining animals were capable of labor, and were to be used in the transportation of food.[64]

Rooting a cadre of animal handlers in the Tajik SSR also helped overcome the need to import individuals who had expertise in managing caravans, or other aspects of draft animal life. In the 1920s and early 1930s, the republic recruited drovers and other animal handlers from parts of Central Asia, especially among Turkmen and Kazakh ethnic groups. Often, such individuals were contracted by expediters along with herds of horses or camels. Because of their foreignness and the circumstances under which they were contracted, these handlers drew various forms of suspicion. Employment in a sector that involved constant travel could complicate confirmation of a person's background. Moreover, Tajikistan often commissioned couriers to hire drovers, and the arrangements involved in the resultant market transactions broke laws including on the regulation of identifying documents. Such was the case of the importation of 2,000 camels, along with drovers, from villages near Bukhara city in 1926. It exemplified the uncertainty that could

[64] RGASPI, f. 62, op. 2, d. 2523, l. 43.

surround animal handlers, and even their charges. As the republican People's Commissar of RKI, Shohrinshoh Shohtemur, reported, Tajikistan authorities had sought support for the contract from upper-level Uzbekistan officials "considering the feebleness of the organizations with whom contracts" were made.[65] Representatives of two village councils in Uzbekistan, however, appeared in Stalinabad to protest the caravan's move. It may be that, so soon after the NTD, lines of authority or markets for animal labor were not yet well established and caused confusion between higher and lower officials. The upheavals of recent Central Asian history also pervaded the crew of the camel drivers, several of whom were apparently former residents of Jilikul, an agricultural center of growing importance in Tajikistan's Vakhsh River valley. They had fled their homes years ago in the wake of conflicts involving Basmachi rebels. Now, Tajikistan authorities investigated their backgrounds and questioned their reasons for returning.[66] Despite the regularity of such confusion, republican officials continued to recruit foreigners experienced in handling large numbers of working animals. Retaining these individuals or having them train others, however, apparently was not common. As late as 1930, republican authorities would report that the republic had no native residents who were skilled in the driving of camel caravans.[67]

The confusion surrounding the business of managing imports of animals and their drovers, as well as their activities in Tajikistan, was often strong evidence of the weakness of the Soviet state in the republic. One of the clear causes of this frailty was the very mobility that the camels and horses were used to generate, moving cargo and people in ways that were hard to track. Means of mobility shifted locations and routes of work frequently, increasing the difficulty

[65] RGASPI, f. 62, op. 2, d. 2112, l. 162a.
[66] RGASPI, f. 62, op. 2, d. 2112, l. 162ab.
[67] TsGART, f. 18, op. 1, d. 216, l. 209

with managing them. For example, reports of ill and dying camels in southern Tajikistan during the winter of 1930-31 illuminated the complicated world of managing animal mobility. In December, the Promkooptrans artel "Kazakh" lost most of its 150 camels to death or illness, while similar problems in the 350-camel artel called "Piatiletka v 4 goda" ("the five-year plan in four years") led to its complete disbandment. A Soiuztrans investigation reported that these troubles might have been related to an individual involved in contracting the animals for import from Kazakhstan. "This very day saw the loss of thirty-two of the artel's camels, and there is no guarantee that all of them will not die."[68] He speculated that each group of sick camels might have been imported through dealings with a single individual named Koshmatov Omarbek. If proven, the man's role in the transfer would "border on sabotage. We are now facing the question of [whether to] forbid any future organization of artels from [among the holdings of] Kazakhs."[69]

The possibility of wrecking in the market for Kazakhstani camels was never resolved. Instead, Soiuztrans and Promkooptrans became embroiled in a controversy about the legitimacy of their investigative officials and the corruption of their artels. In January and February, a dispute arose over the issue of the sickly camels that exposed the lack of state control over personnel involved in animal management. A Promkooptrans investigator, Mansurov Zaur-Bek, sparked the problem by disputing the earlier Soiuztrans report. His accounts portray the operating atmosphere I analyzed in Chapter 3, characterized by the absence of law and accountability. He criticized shipping agents of southern regions of selectively dismissing assigned jobs, taking on passengers instead of assigned cargo, and of even working where they

[68] TsGART, f. 93, op. 1, d. 64, l. 12.
[69] TsGART, f. 93, op. 1, d. 64, l. 12.

wished.[70] More important to this discussion, he contested the reliability of reports about the camel losses because of his perception of pervasive corruption. He reported that the alleged illness of the "Kazakh" artel's camels and other "abnormal statements coming from the artel" could not be confirmed because of the fact that the representative of the workgroup was "hiding" during the investigation.[71] In the case of the loss of thirty-two camels in Qurghonteppa, corruption—not suppliers from Kazakhstan—was more clearly to blame. Of the total lost, he only confirmed that twelve had indeed died. Fifteen others "lost on the road" were later recovered in Stalinabad, while the remaining five were outright stolen "by people who scattered to Afghanistan."[72]

Zaur-Bek too, however, was an import, whose own background, credentials, and right to criticize came under attack immediately. Promkooptrans officials in Stalinabad responded to his reports by questioning his identity, and demanding information about it from the Qurghonteppa office that had hired him—explicitly hoping it would be amenable to his dismissal. Their motive most likely was to undermine his open discussion of systemic problems in the management of animal mobility, or to his observation of Soiuztrans' abuse of its authority in the use of transportation resources under other organizations. Zaur-Bek was aware of these concerns and also tried to allay them in the same message where he asked to be removed from his post. "I have been courier…I have been an agent, I have been a stableman, I have been an instructor, I have been a representative, and today" management is asking me in what capacity and post I have

[70] TsGART, f. 93, op. 1, d. 64, l. 35b.

[71] TsGART, f. 93, op. 1, d. 64, l. 31ab.

[72] TsGART, f. 93, op. 1, d. 64, l. 31a; and Message addressed to Promkooptrans management, attributed to Mansurov Zaur-Bek, January 1931, TsGART, f. 93, op. 1, d. 64, l. 34 (full document).

been assigned to Qurghonteppa.[73] He also hypothesized that he was now under attack because of having disagreed with several officials on how much money and equipment was needed, in addition to condemning the operations of most local artels.[74] The confusion surrounding this case—the lack of clarity about his identity, his job title, attempts of officials in Qurghonteppa and Stalinabad to understand the causes of reported camel illness and death, who was responsible, how to remedy it, and whether any of it really happened—illuminated continuing state inefficiency in the business of managing animals.[75]

Despite the ubiquitous corruption in shipping, and transportation more generally, officials who worked with camels did their best to overcome mobility challenges associated with shortages. At times, these were especially creative efforts that reflected the endeavor to include animals in modernization of the economy. In the summer of 1930, for example, officials intended to alternate camels for a herd of Samarkandi horses whose arrival in the republic would be delayed two to three weeks. The substitutes would enable the use of 300 carts recently imported from Petropavlovsk. Gosplan officials decided to take this opportunity to raise "the scale of freightage facilitated by camel transportation, [whereby] it is necessary to convert it from pack animal to wheeled [hauling] on various routes."[76] These authorities resolved to conduct experiments in order to find a way to harness the camels to carts. Apparently, they were unaware that models of such practices already existed in Central Asia, despite enlisting of camel

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[73] Message addressed to Promkooptrans management, attributed to Mansurov Zaur-Bek, handwritten, 15 Jan 1931, TsGART, f. 93, op. 1, d. 64, l. 33a (full document is ll. 33a-b).

[74] TsGART, f. 93, op. 1, d. 64, l. 33b. He specifically identified Jilikul is the place with the highest degree disorganization among drivers and camel drivers. See TsGART, f. 93, op. 1, d. 64, l. 33a.

[75] Message addressed to Efelov Director of Promkooptrans' Qurghonteppa office), no. 2-2-74, attributed to Promkooptrans' Stalinabad office, signed by Fazilov (Management) and Andreev (Organizational Bureau), 1 February 1931, TsGART, f. 93, op. 1, d. 64, l. 32 (full document).

[76] Record of proceedings of a 8 June 1930 interdepartmental meeting held by Gosplan Tajik SSR in Stalinabad, signed by Barshchevskii (Chair) and Sigai (Secretary), TsGART, f. 93, op. 1, d. 18, ll. 1-3 (full document).

drovers from across the region.[77] As Bulliet explains, "camels have been used to draw carts in Central Asia since the earliest domestication of the two-humped [Bactrian] species."[78] Given the Slavic names associated with this resolution, the officials' foreignness is attributable to their ignorance of traditions of camel-powered vehicles in Central and South Asia, and the Middle East. It is a common mistake, especially in places where camels were less used.[79]

The possible inexperience of upper-level officials with this animal may also be the reason for the lesser emphasis they gave to developing and using its stock. The high point for Tajikistan's camel population was 1932-1933, when it totaled 6,000-7,000. Within two years, the population dropped by about half due to export. The reason is unknown.[80] It may be that as the state endeavored to establish institutions for breeding—within the larger effort to control means of mobility discussed in Chapter 3—it concurrently closed native and local camel breeding activities throughout the republic. Diverse kolkhozes and sovkhozes bred Bactrian and Dromedary camels until 1936, when the state replaced them by establishing three new republican camel farms, which took acquired bred animals and some from dissolved artels.[81] By this action, Tajikistan joined the fringes of a larger project of experimental breeding with camels in Central Asia and the Caucasus—the USSR being the only place in the world conducting such exercises with these animals in the 1930s.[82]

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[77] TsGART, f. 93, op. 1, d. 18, ll. 1-3.

[78] Bulliet, *Camel and the Wheel*, 208.

[79] Ann Greene's attempt to praise the hardiness and strength of these animals leads her to claim that "Their carrying capacity eliminates the need for wagons." See Greene, *Horses at Work*, 36.

[80] Report on "Camel Breeding in the Tajik SSR," signed by S. Butovskii, 9 August 1936, TsGART, f. 18, op. 1, d. 1541, l. 76 (full document).

[81] TsGART, f. 18, op. 1, d. 1541, l. 76.

[82] Bulliet, *Camel and the Wheel,* 142-43; S. N. Bogoliubskii, *Proiskhozhdenie verbliudov* (Alma-Ata, Kazakhstan: Obshchestvo izucheniia Kazakhstana, 1929), 32; and Jean-Paul Roux, "Le Chameau en Asie Centrale: Son nom, son elevage, sa place dans la mythologie," *Central Asiatic Journal: International Periodical for the Languages, Literature, History and Archaeology of Central Asia* 5, no. 1 (1959): 49.

By comparison, the farming of horses had been a much more structured activity in Central Asia and Tajikistan, benefitting from greater state investment. By the mid-1930s, such institutions had multiplied within the republic to include establishments throughout the southern and northern regions of the republic. Usually, breeding activities were associated with a collective farm of some kind, beginning operations with horses confiscated from local bais or from liquidated artels.[83] Successes in horse breeding also led to the opportunity to make mules, which were hardy working animals. Thanks to a large number of births at "the 41st" in the summer of 1935 (133 offspring), more than 100 of its studs and mares were combined with 63 mule mares imported from the RSFSR to establish a "mule farm" (*mulozavod*) called the 126th, on "territory B of the dairy farm."[84] A reporting official viewed this as an especially significant accomplishment since the entire republic contained only 27 mules at the time, 10 of which were at the new mule farm. "Mule breeding is a completely new sector in Tajikistan."[85]

The combined number of horses across all farms was still in the hundreds, but officials were positive about their prospective growth. This bright outlook was derived from the fact that there were already, by the mid-1930s, signs that Tajikistan's breeding operations were surmounting various equine health challenges. In addition to farms' inherently promoting better treatment of animals, they were making progress in improving the physiology of the horses through proper care and breeding across generations of animals. One of the key measures used by Central Asian horse management for gaging the vitality of their horses was height and form. When horse stocks were depleted in the mid-1920s, authorities reported that malnutrition and ill-

[83] Report on "Horse Farms in the Tajik SSR," signed by S. Butovskii, 9 August 1936, TsGART, f. 18, op. 1, d. 1541, l. 80 (full document).

[84] TsGART, f. 18, op. 1, d. 1541, l. 77.

[85] TsGART, f. 18, op. 1, d. 1541, l. 77.

use led to their shrinking size. To them, animal health was a clear reflection of the bad state of the economy and exacerbated it. Where the average height of the Kyrgyz breed had, for example, been 2 arshins, it dropped to 1.13 arshins in the mid-1920s. Their suitability to use in various activities is lacking, cannot be considered for agriculture, nor for remount services," in addition to its overall lower "productivity."[86] Ten years later, Tajikistan officials boasted that the average height of their horses had reached the original Kyrgyz mean, and were consistently getting bigger as they got older. Jumping ability, too, was identified as a sign of capability and health, and officials bragged that Tajikistan horses distinguished themselves among Central Asian ones in competitions. One horse from the Yovon region, called Tukhachevskii, allegedly won two first and two second place prizes out of four tries at a competition in Tashkent.[87] He, like others from the republic's farms, was taught this and other skills at the training center for horses ("*trenkoniushniu*") in Sharhrinau—the first of a planned growing infrastructure of such institutions.[88]

These symptoms of health and sophistication were part of the broader project of altering physical characteristics in horses that could serve economic growth. To do so, they needed the ability to perform certain kinds of labor, such as handling various cargos, while having the ability to do so within diverse material environments. To the officials administering Central Asia's horse stocks in the mid-1920s, the main regional breeds suffered additional health defects because they had been uprooted from the regions and lifestyles their biology disposed them for. Of the three most common kinds—the Karabair, the Kirzhiz, and the Turkmen—the latter, now only 2 percent of the total population, suffered especially. "They are disappearing in hundreds

[86] RGAE, f. 4372, op. 15, d. 452, l. 19a.
[87] TsGART, f. 18, op. 1, d. 1541, ll. 78, 80.
[88] TsGART, f. 18, op. 1, d. 1541, l. 80.

since it is a kind of horse with narrow specialization, determined by breeding in a bounded region, having a particular natural and economic historical conditions (Turkmenia, Khorezm, Persia)." The economic landscape of its native land was changing from nomadic to settled and agricultural forms of life.[89] "Its lack of mobility has affected the exterior form and internal quality [of these animals] extraordinarily unfavorably," including "angular form" and "disproportion."[90]

Soviet officials of the mid-1920s focused their hopes on the Karabair breed because they believed it was most likely to thrive in multiple economic sectors and tasks across Central Asia's varied terrain. It made up 37 percent of the population, and also was the hardiest of the three despite the fact that its stock also suffered in current conditions.[91] The Karabair's abilities corresponded most closely to needs projected in one report as a horse that was "strong, sufficiently grown, having good endurance, comparatively inexpensive," and able to work in agriculture. It hoped that this kind of horse would go hand in hand with the planned growing fleet of machines that would enable more intensive farming, and replace animals traditionally used in tillage. "At the same time, Turkestan's immense mountainous spaces and roadlessness allow only surface travel that requires saddle [rideable] horses for supplying above all the army." The report concluded that Turkestan needed a single, versatile breed, suited to draft work in agriculture, to hauling artillery and supplies, as well as to riding.[92]

Tajikistan's horse breeders defined their needs in very similar terms, and that is why one of their two primary types was the versatile Karabair. The republic also, however, produced a

[89] RGAE, f. 4372, op. 15, d. 452, l. 19a.
[90] RGAE, f. 4372, op. 15, d. 452, l. 16b.
[91] RGAE, f. 4372, op. 15, d. 452, l. 17a.
[92] RGAE, f. 4372, op. 15, d. 452, ll. 17b. See also RGAE, f. 4372, op. 15, d. 452, ll. 36b-34a.

horse called the Lokai because it was even more adapted to the uniquely mountainous conditions.[93] Like the Karabair, it could pull, carry, and be used in service of military on variable and especially mountainous terrains. Soviet officials believed that the Lokai was formerly seen as part of the Karabair breed. But they now saw this noticeably smaller, often curly haired variety as its own breed of horse. They may have been unaware that the Lokai horse had already been bred in the southwestern region of Tajikistan going by the same name for several hundred years.[94] Preceding inhabitants bred an animal to facilitate mobility in this landscape. As a republic official explained, "for mountainous regions of Central Asia, the Lokai is the best saddle and pack horse to which it is unlikely that any other cultivated species could compare."[95] By 1936, then, Tajikistan had established the means to produce horses suited to transportation in its unique territory, in addition to already possessing a large number in use.

The security represented by this situation contrasted sharply with the continuing dependence that characterized attempts to improve the fleet of automotive vehicles, and related capital. The machine transportation sector had grown rapidly since the late 1920s, but it could not keep pace with the constantly rising targets and scale of change within the republic. Where only 17 machines could be found in the entire republic in 1928, their number grew to 366 in 1930, 487 in 1932, 804 in 1934, and 1,500 by the start of 1935.[96] An SNK Tajk SSR report explained that "the republic's "fleet of automotive vehicles is growing rapidly, though it

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[93] TsGART, f. 18, op. 1, d. 1541, l. 80.

[94] Khazanov, *Nomads and the Outside World*, 49.

[95] Report on "The Lokai Horse," signed S. Butovskii, 11 August 1936, TsGART, f. 18, op. 1, d. 1541, l. 81 (full document).

[96] "Report on the question of the the state of automotive transportation in Tajikistan and the measures necessary to properly use it," addressed to Comrade A. A. Andreev (Secretary of the TsK VKP(b) and Comrade V. Ia. Chubar' (Deputy Chairman of the SNK USSR), attributed to Ashurov (Secretary of the Central Committee of the Communist Party of the Tajik SSR) and Kaktyn' (Deputy Chair of the SNK Tajik SSR), 16 April 1935, GARF, f. 5446 (Council of People's Commissars of the USSR and Council of Ministers of the USSR, 1923-1991), op. 16a, d. 774, l. 3 (full document is ll. 3-8).

[growth] is carried out in a spontaneous (disorganized) manner, lacking a balanced, focused plan for transportation, lacking a corresponding equipping of the motor deep and garages….and finally lacking a sufficient number of qualified cadres."[97] To the report authors, the scattered nature and spontaneous growth of the fleet made it hard to assess, and that it also caused the following problems: lack of garages and mechanics; lack of plans for shipment; a corresponding lack of control over assignments; lack of systematic upkeep and repair; lack of account of operations such as usage of machines and labor; breaking of standards for usage and repair; lack of standards in the selection of cadres as drivers (including technical and social standing).[98] Of the 225 individual fleets in the republic at this time, only 10 percent had a repair shop.[99] As I explained in Chapter 3, unplanned and illegal relationships continued to dominate shipping and the use of means of mobility in general through the 1930s. The report concluded that "the negative situation of the automotive economy is mainly the result of criminal and impractical behavior of agency drivers and separate economic organizations entrusting them with valuable state property."[100] These problems, combined with the pace of change in the republic, created a mobility environment unfavorable to mechanized means of mobility. It was the opposite of the situation under development in animal mobility.

Conclusion

In this chapter, I argued that Soviet ambitions for the modernization of transportation, and the economy as a whole, were accomplished by horses and camels, rather than by machines.

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[97] Parenthetical note in original. GARF, f. 5446, op. 16a, d. 774, l. 3.
[98] GARF, f. 5446, op. 16a, d. 774, l. 4.
[99] GARF, f. 5446, op. 16a, d. 774, l. 4.
[100] GARF, f. 5446, op. 16a, d. 774, l. 4.

Ungulates were a more reliable mode of mobility from the perspective of availability because they could be bred within the republic, or imported and cared for more easily than automotive vehicles. In fact, the manner in which they were used, through mass mobilization and technological control for the purpose of economic growth was comparable to other modernizing contexts of the globe in the nineteenth and twentieth centuries. Breeding for specialized functions and abilities was also a characteristic of these situations. In the Tajik SSR, breeding of camels and especially horses deemed suitable to the republic's particular physical environment was an endeavor of modernization. It also, however, was a way of accommodating—or managing—the particular landscape of mobility in the republic, being that ungulates could do most of the work that machines could to enable that state pursuit of goals in economic growth. While the Soviet desire to entirely mechanize freightage was impossible, locations and enterprises throughout the republic could be served by animal transportation of cargos on the difficult terrain.

These finding indicate that further study of the use of pack and draft animals throughout Central Asia and the USSR might encourage reconsideration of the meaning of cultural and symbolic endorsements of machines—whether by socialist officials or scholars. Foregrounding and exploring the historical presence of camels or horses in state endeavors can lead to fuller understandings of how economic tasks, forms of communication, or other transport-dependent activities were accomplished at large and everyday levels. Not all regions of the USSR possessed or had access to the same levels and means of transportation. The implications of a whole republic, such as Tajikistan, using predominant animal mobility were politically greater than they were for an area of lesser status. In either case, though, the inhabitants and enterprises of such regions experienced economic and political life very differently from those of spaces where

machines were more prevalent. They were lesser known regions that related to ideology and propaganda, as well as to other places in ways that might not be well reflected in studies that focus on better known areas or on machine transportation. As I discuss in the next chapter, Tajikistan officials also found that badly needed mechanized mobility infrastructure and resources were also intrinsically harder projects to delimit. Because of this, planners were not in full control of the location and tempo of large-scale settlement and economic growth, nor how it would occur in places where transportation capital acquired unique, unanticipated status among individuals and organizations who engaged in shipping every day.

When it came to animals the entire constellation of activities related to supporting mobility also became more vulnerable. Beasts can die and become ill, which were high possibilities in Tajikistan's dependency regime. Furthermore, working animals do not fare well in situations of regime crisis, as the case of the declining Central Asian horse stocks of the mid-1920s exemplified. Tajikistan's growing security in the access to, use, and production of pack and draft animals in the later 1930s, therefore, reflected a better established, stronger Soviet state, even if it was differently mobile and differently modern from the way that was desired.

CHAPTER 5

THE DEVELOPING GEOGRAPHY UNDER STALIN: LOGISTICS AND THE VAKHSHSTROI RAILROAD

This chapter analyzes why a service railroad became the most important economic thoroughfare of the Tajik SSR's southern regions of the 1930s, and how it came to shape the geography of Soviet life there. I will argue that its fate as the unintended primary road of the Vakhsh River valley is comparable to other postcolonial international "aid" and development contexts, and thereby suggests approaches to enhancing understandings of the grand projects of the Stalin-era. In the 1930s, the Vakhsh valley was a top recipient region of Soviet capital investment in Tajikistan and Central Asia. The importance of the railroad, however, was under-recognized until the end of the decade. As a secondary priority, this narrow gauge track (*uzkokoleika*, in Russian) was so poorly constructed that trains traveling faster than twenty-five kilometers per hour risked an accident.[1] But its unanticipated, rapidly growing role as a channel for commodity mobility strengthened Soviet presence by facilitating conditions for economic growth, and creating a physical environment for the state.

This chapter demonstrates the global relevance of this story by drawing on a multi-disciplinary body of studies addressing roads projects in postcolonial contexts. I engage Tajikistan as a Soviet "aid" recipient in order to analyze the complicated relationships and power imbalances that characterized and ultimately drove everyday governance within its borders. Doing so, I argue, frames socialist governance as an early model of "international development."

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[1] Record of proceedings of a 31 March 1937 meeting with the Chairman of Gosplan of the Tajik SSR, Central State Archive of the Republic of Tajikistan (*Tsentral'nyi gosudarstvennyi arkhiv respubliki Tadzhikistan*; hereafter TsGART), f. 20 (State Planning Commission of the Tajik SSR (Gosplan Tajik SSR), op. 2 (1930-1947), d. 943, l. 4 (full document is ll. 4-9); and Report "On the state of the narrow gauge railroad," addressed to the Chairman of Gosplan Tajik SSR, attributed to V. P Osadchii (Chief of the Vakhshstroi Railroad), received 28 October 1936, TsGART, f. 20, op. 2, d. 943, l. 50 (full document is ll. 41-62).

It is a historiographically unfamiliar example and perspective on this global phenomenon because it lay outside the Euro-American imperial world. By conceiving of the Tajik SSR as an object of foreign aid projects, I furthermore avoid limiting the factors and lessons of this story as yet another direct evolution of ideas, categories, and relationships borne of colonialism.[2] Rather, it allows me to evaluate social and economic dynamics by accepting and engaging their productive nature and energy, and the real, lasting change they generated.

The railroad I am discussing was first conceived and intended as a support line for operations to establish a cotton agro-industrial complex in the Vakhsh valley (please see attached maps). This so-called Vakhshstroi was a grand Stalinist mobilizational project that—rather unlike its railway—did not achieve the lofty ambitions of its planners. Conceived in 1929, and added to Tajikistan's first five-year plan in 1930, the Vakhshstroi's mission was the construction of hundreds of kilometers of new canals to irrigate mostly new fields for cotton cultivation, all while establishing new farms and settlements, cotton gins, and hydroelectric dams to power the enterprise and the region.[3] During its first year in operation, from 1931-32, it became the largest economic development project in Central Asia, touted as promoting the cotton independence of the USSR at a time when the product was mostly imported from the United States.[4] By 1939, however, the plan to irrigate one hundred and ten thousand hectares had fallen short, at only

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[2] On the importance of considering alternate views of post-tsarist Central Asia, see Adeeb Khalid, "Locating the (Post-) Colonial in Soviet History", in *Central Asian Survey* 26, no. 4 (December 2007): 465-73.

[3] "Resolution based on Kaktyn's report on Vakhshstroi," 1932, Russian State Archive of Socio-Political History (*Rossiiskii gosudarstvennyi arkhiv sotsial'no-politicheskoi istorii*; hereafter RGASPI), f. 62 (Central Asia Bureau of the Central Committee of the Communist Party of the Soviet Union), op. 2 (1929-1934), d. 2782, l. 72 (full document is ll. 65-74); and "The Vakhsh Valley Project," *Central Asian Review* 4, no. 3 (1956): 264.

[4] Report titled "Description of the Vakhsh irrigation project and its immediate needs," signed by Syromiatnikov (Head Engineer of Vakhshstroi) in Tashkent on 19 June 1932, RGASPI, f. 62, Op.2, d. 2782, l. 49 (full document is ll. 48-59); and "The Vakhsh Valley Project," 265; and Khomidov Furkat, *Vakhshstroi: detishche druzhby narodov* (Khujand, Tajikistan: Tsentr molodezhnyikh initsiativ "Ittifok," 1998), 18.

about forty-two thousand hectares, and hydroelectric stations were still only a distant possibility.[5] Meanwhile, its railroad had become much more consequential. Completed in 1935, it extended from the Amu Darya River port city of Panji Poyon, north to Qurghonteppa, with a leg connecting Jilikul to the main run. Altogether, it consisted of about one hundred and twenty-five kilometers of track.[6] And it had already come to serve as a preferred and dominant route for many economic and state activities of the region that were not directly affiliated with the Vakhshstroi. Its rise to prominence would garner such epithets as "Southern Railroad" and "Vakhsh Railroad."[7] The significance it represented to regional economic development inspired one Tajik historian to later call it "our Turksib," referring to the most famous railroad project of the Stalin period.[8] The latter, far larger line, whose construction began at the turn of the century and was completed in 1930, extended from Siberia across Kazakhstan to Uzbekistan. It was the object of much propaganda and historiography, and and is credited with promoting the growth of Central Asia's economy because of improved communication with Russia.[9] In reality, the Turksib did not come into heavy use until the end of the 1930s.[10] Its relationship to, and impact on, the historical development of the Central Asian (or even, the broader Soviet) economy, and

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[5] "Explanatory Note on Vakhsh Construction in the 2nd, 3rd, and 4th Quarters of 1932," attributed to Artykhbaev (Deputy Head of Vakhshstroi) and Syromiatnikov (Head Project Engineer), n.d., TsGART, f. 268 (Administration of the Vakhsh Irrigation Project of the Tajik SSR, Under the Central Asian Construction Trust for Government Irrigation Works (Vakhshstroi), op. 1 (1929-1940), d. 29, ll. 1-2 (full document is ll. 1-7); and P. A. Vasil'ev, *Tadzhikistan (ekonomiko-geograficheskoe opisanie)* (Stalinabad: Gos. Izd. Tadzh. SSR, 1947), 145-46. Work on the project continued after World War II, though it is hard to gauge progress from the secondary literature. See, for example, R. M. Masov, ed., *Noveishaia istoriia (1917-1941)*, vol. 5 of *Istoriia Tadzhikskogo naroda* (Dushanbe: Institut istorii, arkheologii i etnografii im. A Donisha AN respubliki Tadzhikistan, 2004), 573-78.

[6] Panji Poyon translates from Tajiki as Lower Panj (*Nizhny Piandzh*, in Russian), and refers to the part of the upper Amu Darya River (Oxus) that forms much of the Tajikistan-Afghanistan border, and is also called the Panj River.

[7] S. Nazrulloev, *Dorozhnoe stroitel'stvo i razvitie transporta v Tadzhikistane, 1917-1941 gg.* (Dushanbe: Izdatel'stvo "Donish," 1979), 138.

[8] Furkat, *Vakhshstroi*, 32.

[9] On the Turkestano-Siberian Railroad (Turksib), see Matthew J. Payne, *Stalin's Railroad: Turksib and the Building of Stalinism* (Pittsburgh: University of Pittsburgh Press, 2001).

[10] Holland Hunter, *Soviet Transportation Policy* (Cambridge, Massachusetts: Harvard University Press, 1957).

to the delay of such grand Stalinist projects as the Ferghana valley's Grand Ferghana Canal, completed in 1940, is underexplored. My analysis of Vakhshstroi's railroad demonstrates that such analysis would illuminate cause and effects of historical contexts, and improve chronologies.

Stalinabad, yes, but *Stalinism*? Tajikistan as a Soviet aid recipient

The contrast between the intended purpose of the Southern Railroad and its real importance is striking. It raises questions about familiar views of 1930s Soviet governance in Tajikistan and across the entire USSR. This period is known for generating some of the core facets of socialist governance that are associated with the leadership of Joseph Stalin. When work on the Vakhshstroi and its railroad started in 1931, it was the height of the first five-year plan. The scholarly consensus is that this program inaugurated the transition to the Soviet economic system. This so-called "command economy" was a highly centralized state bureaucracy for cross-sectoral management that changed very little between 1932 and 1957.[11]

The actual unfolding of economic development that I observe in the Vakhsh River valley region stands at odds with the vision of a system that concentrated decision-making in the executive institutions of the USSR, and ultimately in Moscow.[12] Here, as I also argue in the other

[11] Alec Nove, *An Economic History of the USSR, 1917-1991*, 3rd ed. (New York: Penguin Books, 1992), 214-17, 226-272; James R. Millar, *The ABCs of Soviet Socialism* (Urbana: University of Illinois Press, 1981), 21-35; and Serguei Alex. Oushakine, "'Against the Cult of Things': On Soviet Productivism, Storage Economy, and Commodities with No Destination," *The Russian Review* 73, no. 2 (April 2014): 203-04. E. A. Rees argues that Stalinism was characterized by the coexistence of central control and of semi-autonomous, institutions. Importantly, however, these were usually often "centrally"-based themselves, either as economic ministries in Moscow, or in republican headquarters. See E. A. Rees, ed., "Conclusion," in *Decision-making in the Stalinist Command Economy, 1932-37* (New York: Macmillan Press, Ltd., 1997), 273.

[12] In this way, this chapter aligns with scholars concerned with models used by most studies of the Stalin era. Please see, David L. Hoffmann, *Cultivating the Masses: Modern State Practices and Soviet Socialism, 1914-1939* (Ithaca:

chapters of this dissertation, upper-level officials disseminated plans setting production targets for every organization within Soviet borders, but they could not prescribe operations and the ways that goals would be met. My analysis of Soviet economic development in the Vakhsh River valley region—and elsewhere throughout Tajikistan and the USSR, as I have demonstrated—attests to decentralized, under-planned activities that resulted in what came to be known as the Soviet state.

My conclusions contradict characterizations of this period as inescapably oppressive and centrally controlled. As I explained in the Introduction, I come to this uncertainty about the large-scale causes and rationales by foregrounding material phenomena and dynamics. Various frameworks are used to interpret paradoxes of everyday economic life like those in southern Tajikistan. The dominant approach of recent scholarship is Stephen Kotkin's view of the USSR as a "participatory totalitarianism." This term refers to the manner in which people who lived on the territories of the Soviet regime, whether they supported its ideology or not, were by varying degrees integrated in and supporting activities that the state promoted as ideological projects.[13] This constellation of institutions, practices, and dispositions are what scholars refer to as "Stalinism."[14] In 1929, Tajikistan symbolically recognized his emergence as the undisputed leader of the USSR by naming its capital "Stalinabad," just months before acquiring status as a fully independent republic in the USSR in the same year. Beyond the symbols and discourses of Communist Party supremacy and political culture, however, grand scholarly assumptions about

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Cornell University Press, 2011); and Anna Krylova, "Soviet Modernity: Stephen Kotkin and the Bolshevik Predicament," *Contemporary European History* 23, no. 2 (May 2014): 167-92.

[13] See Astrid Hedin, "Stalinism as a Civilization: New Perspectives on Communist Regimes," *Political Studies* Review 2, no. 2 (2004): 169, 174; and Stephen Kotkin, *Magnetic Mountain: Stalinism as a Civilization* (Berkeley: University of California Press, 1995).

[14] See, for example, Robert C. Tucker, "Introduction: Stalinism and Comparative Communism," in *Stalinism: Essays in Historical Interpretation*, ed. Robert C. Tucker (New York: W. W. Norton and Company, Inc., 1979), xi-xx; and Sheila Fitzpatrick, ed., *Stalinism: New Directions* (New York: Routledge, 2000), 2.

average people participating in Stalinism do not explain how economic life actually worked, or even the everyday economic motivations for those operations. I show that enacting profound societal change was a messy affair, even if its many parts operated in officially common cause. My approach provides an understanding of relationships that are not exclusive of others observed in the historiography. The ad hoc operations that I highlight may often have been concurrent with and woven into actions implying participation in a society that might be characterized as totalitarian, whether in Tajikistan or elsewhere. In fact, the behaviors I describe tend to be obscured by such universalizing (or, totalizing) analytical pronouncements about how things worked across the USSR.

Nothing about the Vakhshstroi or its railroad was planned carefully, as its managers and experts of the 1930s affirmed. The authors of regular evaluations of ongoing activities were often open about the fact that they considered the project's plans to be audacious. A report by the Vakhshstroi leadership in the first quarter of 1932 stipulated that their remarks would be tentative since all previous and planned work was conducted on the basis of only approximate plans, and this continued to be the norm.[15] Central Asia Bureau officials in Tashkent challenged this a few months later, alleging that the first year of operation progressed without any operational plan at all.[16] The practice of improvisation, furthermore, led to an apparent laxity in planning procedures and deadlines. In 1935, for example, several budgeting exercises meant for the spring were delayed to December because previous budgets could be applied to incomplete work that had been delayed for as much as half a year.[17] Even as late as 1937, a top official

[15] TsGART, f. 268, op. 1, d. 29, ll. 1-2.

[16] RGASPI, f. 62, op. 2, d. 2782, l. 72.

[17] "Explanatory note regarding the technical report on the Vakhsh Irrigation Project for 1935," attributed to Tolstopiatov (Head of Project) and Kuznetsov (Temporary Head Engineer), 1936, TsGART, f. 268, op. 1, d. 94, l. 31 (full document is ll. 28-82).

commented comically on the nature of plan implementation, amazed that a project of Vakhshstroi's scale could be conducted so haphazardly. To him, though, plans and budgets were necessarily unrealistic, since it was difficult to estimate the needs and productivity of labor. He saw no alternative to the practice of entrusting workers or agencies by a "tradition" where they were expected to work without concrete budgets and guidelines.[18]

This official failed to mention that the byproduct of conducting urgent business this way was wastefulness, shoddy work and, above all, profound suffering among the laborers and animals involved. On the railroad, improvised construction produced a low grade, dangerous route in need of continuing repairs until at least after the 1930s. It violated many Soviet technical norms, against planners' wishes. Only twenty-one kilometers of the route had any ballast at all. Crossties, too, "were laid in a manner that digressed greatly from technical norms, both in the number of crossties used per kilometer of route, and in the quality of the crossties." The chief cause of the poor quality and low usability of the railroad, however, was the fact that no tie plates at all had been placed under the rails, which led to more rapid deterioration of the crossties and other components.[19] Immigrant laborers on the railroad, the Vakhshstroi, and other valley projects, often left the region because of trying conditions. They faced inconsistent employment and wages, a lack of such basic support as tents and food, as well as difficult environmental conditions, characterized by poor infrastructure, unfamiliar tropical climate, and diseases such as malaria.[20]

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[18] Report addressed to Comrade Rudzutak (Deputy Chairman of the SNK of the USSR) et al., attributed to V. Beliakov (Head of Vakhshstroi), 1937, secret, TsGART, f. 268, op. 1, d. 94v, ll. 6-16 (full document).

[19] TsGART, f. 20, op. 2, d. 943, l. 4.

[20] Report titled "Commencement," addressed to the Central Asia Bureau (Sredazbiuro), signed by Vlasov (Deputy of the Secret Section), 27 October 1931, RGASPI, f. 62, op. 2, d. 2523, l. 60 (full document is ll. 60-61); RGASPI, f. 62, op. 2, d. 2782, l. 69; V. G. Glushkov, "Voprosy irrigatsii v Tadzhikistane," *Problemy Tadzhikistana: Trudy pervoi konferentsii po izucheniiu proizvoditel'nykh sil Tadzhikskoi SSR*, vol. 1, ed. A. E. Fersman et al. (Leningrad:

This story is a familiar one. As I argued in earlier chapters, stock explanations drawn from the historiography of the early Stalin period often prevent a understandings of how economic development, and resultant state- and community-building, progressed dynamically and chronologically on (and in) the ground.[21] My assessment, instead, joins a growing family of studies that seek to assign definite causes to ubiquitous phenomena, such as commodity "shortages" that tend to be uncritically accepted as characteristic of socialism.[22] In Chapter 3, I argue for a more nuanced, relational view of planning problems and shortages based on my analysis of commodity chains of the Tajik SSR. A broad array of shipping agents and agencies across the USSR were responsible for Tajikistan's material support and often the cause of capital shortages. Every Soviet endeavor in early years of the republic was entirely dependent on other regions of the USSR. Not only did authority, plans, and finances flow from Moscow. All of the materials needed for construction hailed from other, primarily "Russian," regions.[23] I find that the character of Tajikistan's material dependency of the 1920s and 1930s was mediated by the contingencies of commodity chains serving it across the vast spaces separating destinations within the republic from sources of cargo.

Izdatel'stvol akademii nauk SSSR, 1933), 148; "The Vakhsh Valley Project," 264; and Maya Karin Peterson, "Technologies of Rule: Empire, Water, and the Modernization of Central Asia, 1867-1941" (PhD diss., Harvard University, 2011), 429.

[21] See, for example, Peterson, "Technologies of Rule," 403, 429. Among other recent studies of planning in practice, Heather De Haan points out that Soviet professionals implementing the somewhat theoretical projects of planners in Nizhny Novgorod encountered a material reality that was not so easy to mold. She, however, is more interested in the politics and discourses of city planning and building. For her discussion of material conditions of project implementation during construction of Nizhny Novgorod, see Heather DeHaan, *Stalinist City Planning: Professionals, Performance, and Power* (Buffalo, NY: University of Toronto Press, 2013), 13, 56-59.

[22] Andrew Sloin and Oscar Sanchez-Sibony, "Economy and Power in the Soviet Union, 1917-1939," *Kritika: Explorations in Russian and Eurasian History* 15, no. 1 (Winter 2014): 11-12; Oushakine, 202. For a more usual understanding of shortages, see Paul R. Gregory and Robert C. Stuart, *Russian and Soviet Economic Performance and Structure*, 6th ed. (Reading: Addison-Wesley, 1998), 115, 127.

[23] Alec Nove and J. A. Newth, *The Soviet Middle East: A Communist Model for Development* (New York: Frederick A. Praeger, Inc., 1967), 26, 114-21; and M. I. Iskandarov and G. Kh. Khaidarov, "Tadzhikistan v period vosstanovleniia narodnogo khoziaistva," in *Tadzhikskaia sovetskaia sotsialisticheskaia respublika*, ed. M. Asimov (Dushanbe: Glavnaia nauchnaia redaktsiia Tadzhikskoi sovetskoi entsiklopedii, 1984), 109.

In fact, the Vakhshstroi was a project of such magnitude that it had its own commodity chains and storage bases in cities of southern Central Asia and throughout the USSR. The enterprise's personnel were faced daily with its dependency on the USSR for needed materials because of constant delays and other complications with the delivery of supplies. Vakhshstroi's managers often felt (with reason) that the cause of perpetual delays was in fact the managers of supply bases in Moscow and Tashkent, as well as governing authorities in those regions.[24]

The project was a great hope, whose problems were emblematic of the larger challenges facing the republic in general, and its southern regions in particular. It was entirely dependent on other regions of the USSR, just like every Soviet ambition in early years of socialism in Tajikistan. The Vakhshstroi alone, as Khomidov Furkat points out, required the importation of "hundreds of thousands of tons of construction materials, mechanisms, equipment...people, and much else."[25]

This chapter interprets Tajikistan as a dependent, peripheral territory of a postcolonial Soviet empire. Framing it this way acknowledges the coexistence of categorically dissimilar—and indeed contradictory—dynamics that characterized the republic's membership in the USSR. On one hand, Russian imperialism pervaded every aspect of socialist governance in Tajikistan, from the condescendingly communicated ideas that motivated educational and cultural standardization programs, to Soviet "Europeans" settling Central Asia, and dominating elite political and technical jobs, as well as the (neo-) colonial rationales that motivated economic planning. On the other hand, most of what concurrently transpired in every sector of early Soviet

[24] See, for example, Order No. 85 (II) of the Administration of the Vakhsh Irrigation Project, signed by Tolstopiatov (Chief of Construction) and Grigorova (Secretary), 23 October 1932, TsGART, f. 268, op. 1, d. 20, l. 91 (full document is ll. 91-95).

[25] Furkat, *Vakhshstroi*, 21.

life in Tajikistan was novel, unquestionably serving and empowering the people who lived within its borders—often as a result of local initiatives and desires.

In this chapter, I side with commentators for whom local, native will and reception with respect to an "international development" project are the best indicators by which to gauge if, or to what degree, the project was intrusive or insidious. Most historians argue that postcolonial, international development only promoted (and promotes) "uneven" relationships between recipient and donor states. Scholars often construe this paradigm as little more than a perpetuation of dynamics and ideologies (such as varieties of *civilizing mission*) based in historically colonial relations.[26] Others note that these relations might have been reconceived, but insist they are "imperialisms by a different set of vocabulary."[27] International development, however, ought not only be distilled to a range of concepts and practices mirroring a colonial legacy. Sometimes, it is difficult to distinguish between constructive and demeaning intentions or outcomes of transnational economic planning.[28] As Frederick Cooper and Randall Packard point out, "the development construct is also a history of how that concept was mobilized and deflected for other ends. People around the world are in some way engaged with far-reaching structures of power, and those engagements take more varied and complex forms than acquiescence or resistance."[29] During the conventional scholarly periodization of the

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[26] This is the central criticism of the dependency and post-development critics. See, for example, Wolfgang Sachs, ed., *The Development Dictionary: A Guide to Knowledge as Power* (Atlantic Highlands, New Jersey: Zed Books, Ltd., 1992); and Gilbert Rist, *The History of Development: From Western Origins to Global Faith*, 4th edition (New York: Zed Books, Ltd., 2014).

[27] April R. Biccum, "Theorising Continuities Between Empire and Development: Toward a New Theory of History," in *Empire, Development, and Colonialism: The Past in the Present*, ed. Mark Duffield and Vernon Hewitt (Rochester: Boydell and Brewer, Inc., 2013), 147.

[28] Frederick Cooper and Randall Packard, eds., *International Development and the Social Sciences: Essays on the History and Politics of Knowledge* (Berkeley: University of California Press, 1997), 17; and Jeffrey Haynes, *Development Studies* (Malden, MA: Polity Press, 2008), 25-26.

[29] Cooper and Packard, *International Development*, 30.

"international development" paradigm as starting after WWII, the term and its manifold meanings were often appropriated with a view to the self-empowerment of formerly colonized and decolonizing peoples around the world.[30] Indeed, the critiques and errors of dependency theorists themselves pointed to the importance of avoiding Euro- or US-centric analysis that often characterizes so-called "post-development" denunciations of transnational aid efforts.[31]

I am addressing the realm of burgeoning popular and state desire for new economic means and capacities in 1930s Tajikistan, and the overwhelmingly positive, available native recollections of the efforts that resulted. This chapter's emphasis on practical matters of economic development—projects—sets its analysis parallel to discourse analyses' object of *imperialistic* rationalizations about culture and politics that we know were part of post-tsarist, Soviet conversations about national and economic regionalization policies.[32] I take inspiration from the astute work of Alec Nove and J. A. Newth—written at the height of the modernization and dependency theories debate—which analyzed Soviet development in comparison to post-colonial, international aid contexts. For them, the application of colonial typologies in the Soviet context depends greatly on what aspect of Soviet regional relations is under consideration. "Our entire judgment of all these matters must be affected by the importance which we attach to the national question."[33] They argue that willing, popular participation and desire for Soviet projects was not necessarily coincident with Russian colonialism anywhere in Central Asia. In southern regions of 1930s Tajikistan, economic growth involved enormous multinational settlement and

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[30] See for example, Cooper and Packard, *International Development*, 9-12; and Rist, *The History of Development*.

[31] Errors implied include the relative economic successes of such states as South Korea, Taiwan, Singapore, and Hong Kong in the 1970s "*despite* the influence of the international economic system" that dependency theorists believed would have been a roadblock. See Haynes, *Development Studies*, 24-28.

[32] On this, see Francine Hirsch, *Empire of Nations: Ethnographic Knowledge and the Making of the Soviet Union* (Ithaca: Cornell University Press, 2005).

[33] Nove and Newth, *The Soviet Middle East*, 125.

re-settlement campaigns of Central Asians, as well as individuals from Soviet regions west and north. Arguably, most of the heretofore ethnically Tajik population of Central Asia, and which came to reside within Tajikistan's borders, had never been on its newly-defined territory before. In the 1920s and particularly the 1930s, hundreds of thousands of people migrated to Tajikistan's southern regions, voluntarily, semi-voluntarily (because of incentives or contracts), and as a result of state coercion. Most of them traveled from other parts of the republic to settle southern agricultural regions. Some of them were return-migrants who had fled to Afghanistan during the post-tsarist wars. Many others still were Russians and Ukrainians, and other nationalities, who came in search of employment or a new home.[34]

"Development" was thus a native, republican, as well as "all-Union" ambition. Tajikistan politicians and scholars often judged the economic vitality of their republic by reference to other regions of the USSR.[35] In fact, state ambitions like Vakhshstroi had significant local political, administrative, popular, and indeed *ex post facto*, support. Economic and engineering experts in Central Asia and across the USSR believed that the project would be a great boon to the republican and Soviet economies. Such Tajik political elites as Abdurakhim Khodjibaev carefully managed lobbying efforts to support this project's advancement alongside other major

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[34] Aleksandr Trushnovich, *Vospominaniia kornilovtsa, 1914-1934* (Moscow: "POSEV," 2004), 308, 314-16; Christian Bleuer, "State-building, Migration and Economic Development on the Frontiers of Northern Afghanistan and Southern Tajikistan," *Journal of Eurasian* Studies 3 (2012): 75-77; Peterson, "Technologies of Rule," 443-44; Kirill Nourzhanov and Christian Bleuer, *Tajikistan: A Political and Social History* (Canberra: Australia National University E-Press, 2013), 64; and Botakoz Kassymbekova, "Humans as Territory: Forced Resettlement and the Making of Soviet Tajikistan, 1920-38," *Central Asian Survey* 30, no. 3-4 (September-December 2011): 352-54. Work on the history of these settlers, who they were, how they came, and from where, are complicated by its stakes for characterizing the Soviet state, nationalities policy, and indeed the foundation of the national republic of Tajikistan. Lewis H. Siegelbaum and Leslie Page Moch show that it can be difficult to clearly identify the driving forces and specifics of migration, whether relating to upper- or lower-level officials, or the settlers themselves. See Lewis H. Siegelbaum and Leslie Page Moch, "Resettlers," chapter 1 in *Broad is My Native Land: Repertoires and Regimes of Migration in Russia's Twentieth Century* (Ithaca: Cornell University Press, 2014), 16-65.

[35] See, for example, Sh. M. Solomonov, "Nekotorye aspekty problemy vyravnivaniia urovnei ekonomicheskogo razvitiia soiuznykh respublik," in *K probleme vyravnivaniia urovnei ekonomicheskogo razvitiia soiuznykh respublik. (na primere Tadzhikskoi SSR)*, ed. Iu. I. Iskhakov et al. (Dushanbe, 1968), 3-24.

economic endeavors.[36] Later generations would recall it with pride, as a glorious national and transnational, cooperative Soviet effort.[37]

Tajikistan's dependency on other regions of the USSR can be seen as a symptom of the mutually beneficial capacities built through the cooperation of pan-Soviet and Tajikistan interests in economy. In fact, it can be argued that Soviet capital investment in Tajikistan—mainly by Russia—was never directly repaid (or, that it is at best difficult to know the "balance" of the USSR's economic relationship with Central Asia).[38] While the details of this relationship reveal disagreements and conflicting motives of various agents, the power brokers at least agreed on the republic's desire, if not need, for external aid. In Tajikistan's southern regions, economic growth and dependency were no mere external creation, but a real outcome of the existence and ongoing Soviet project of the republic.

Unanticipated outcomes on the Southern Railroad

Framing Tajikistan as an aid recipient of the USSR allows me to draw on studies of roads projects in international development contexts for my analysis. From this perspective, the Southern Railroad was less of a tool of colonial occupation; this section focuses on the ways that

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[36] Peterson, "Technologies of Rule," 396-399; "Vakhshstroi zakonchit' v srok," *Kommunist Tadzhikistana*, no. 149, 2 July 1931: 2; and "O Vakhshstroe," Resolution No. 4 of the Second Congress of the Communist Party of Tajikistan, *Kommunist Tadzhikistana*, no. 19, 28 January 1934: 2-4.

[37] See, for example, K. Khasanov (Secretary of the TsK LKSM of Tajikistan), "Tadzhikskaia byl'," *Komsomol'skaia Pravda*, no. 269, 16 November 1958: 4; Furkat, *Vakhshstroi*; Pavel Luknitskii, *Tadzhikistan* (Moscow: Izd. TsK VLKSM "Molodaia gvardia," 1957), 375-81; V. G. Knoochkin, "Tridsat' let spustia," in *Govoriat stroiteli sotsializma v Tadzhikistane (Vospominaniia uchastnikov stroitel'stva sotsializma v Tadzhikistane)*, ed. A. M. Bogoutdinova (Dushanbe: Izd. "Irfon," 1967), 172-96. Rakhmon Safarov, *Kahramoni Vakhsh va Dnepr* (Dushanbe: Nashriyoti "Irfon," 1982), 47-48. Today, few of the residents of Tajikistan or greater Central Asia are willing to commit to a view of the Soviet period as colonial. See Sergei Abashin, "Nations and Post-Colonialism in Central Asia: Twenty Year Later," in *Development in Central Asia and the Caucasus: Migration, Democratisation and Inequality in the Post-Soviet Era*, ed. Sophie Hohmann et al. (New York: I.B Tauris and Co. Ltd, 2014), 86-91.

[38] Nove and Newth, *The Soviet Middle East*, 114, 125-26.

it became the key conduit for state investment. In Tajikistan, as Ia. Bronshtein noted in the 1960s, economic development "was directly dependent on securing the [transportation] connection of the republic with central regions of the country [the USSR]."[39] Although the Southern Railroad was not planned for such a large role, its capacity for facilitating movement made it irresistible to regional enterprises that were not meant to use it. Socialism adjusted to its mistakes within the Vakhsh valley, making good on the reality that had evolved on its territory.

Soviet planners' original misunderstanding of the route's likely future importance may seem like a profound blunder. It corresponds, however, to global patterns of road infrastructure construction and usage. The real impact of roads on regional economies is often hard to anticipate, and far more variable than common sense and assumptions, or plans, ever suggest. And even so, in discourses about international aid and development—and economic development in general—roads are a topic of convergence because of overwhelming evidence for the fact that ways of communication ensure the feasibility of economic growth in regions that depend on foreign sources of capital. Economic commentators and planners have historically tended to see land transportation infrastructures as a relatively unambiguous good, much as they do today.[40] In fact, Soviet experts of the 1920s, 1930s, and later, employed a term of classification—*bezdorozhnost'* ("roadlessness")—in order to qualify how bad regional opportunities for mobility manifested in poor economic conditions, with corresponding categories of degree.[41] Elsewhere, in the colonized and post-colonial lands of the nineteenth,

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[39] Bronshtein, Ia. "Vliianie transporta na razvitie ekonomiki Tadzhikistana," in Iskhakov et al., 64.

[40] See, for example, Amar Bhattacharya et al., "Infrastructure for Development: Meeting the Challenge," Policy Paper for the Center for Climate Change Economics and Policy, the Grantham Research Institute on Climate Change and the Environment, and the Intergovernmental Group of Twenty-Four, June 2012.

[41] For a discussion of ways Soviet officials used the term "roadlessness," see Lewis H. Siegelbaum, "Roadlessness and the 'Path to Communism': Building Roads and Highways in Stalinist Russia," *Journal of Transport History* 29, no. 2 (September 2008): 277-94; and Chapter 2 of this dissertation.

twentieth, and twenty-first century worlds, experts have promoted roads infrastructure as always beneficial to the economic growth of a region, including where such roads were explicitly used for exploitative purposes.[42] Critical studies of land transportation, however, emphasize that roads projects, and the roads themselves, are like any other object of analysis: part of a dynamic field of relations—both physical and abstract.[43] The actors, rationales, political ideologies, and economic dogmas that motivate infrastructure construction do not only change from place to place, and state to state, but also over time. Even more importantly, perhaps, the post-construction, real-world relevance of roads upon completion is always different from the frequently myopic visions that led to their realization.[44]

Such is the story of the changing meaning of the Southern Railroad in the 1930s. Its significance exploded beyond that of a dedicated supply route to worksites of the Vakhshstroi because other enterprises of Tajikistan's southern regions faced identical mobility problems. "Roadlessness" was a contextual challenge shared by all agencies and agents throughout most of the republic. As I detail in Chapters 1 and 2, southern Tajikistan bore none of the material or social antecedents that were platforms for Soviet economic development in other, even less economically developed parts of the former Russian empire. Prior to the mid-1920s, the territory of Tajikistan had hosted neither modern agricultural and economic activities, nor modern roads

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[42] See, for example, Samir Amin, *Neo-colonialism in West Africa,* trans. from French by Francis McDonagh (Baltimore, MD: Penguin Books, Ltd., 1973), 99-101, 126-27, 138; Walter Rodney, "Colonialism as a System for Underdeveloping Africa," chapter 6 in *How Europe Underdeveloped Africa* (Washington, D.C.: Howard University Press, 1981), 203-282; and James Ferguson, *The Anti-Politics Machine: Development, Depoliticization, and Bureaucratic Power in Lesotho* (Minneapolis: University of Minnesota Press, 1994), *56*-58.

[43] See, for example, Pierre-Richard Agenor, "A Theory of Infrastructure-led Development," *Journal of Economic Dynamics and Control* 34 (2010): 932-50.

[44] Dan Bogart, "Did the Glorious Revolution Contribute to the Transport Revolution? Evidence from Investment in Roads and Rivers," *Economic History Review* 64, no. 4 (2011): 1073-1112; and Jonathan Demenge, "Development Theory, Regional Politics and the Unfolding of the 'Roadscape' in Ladakh, North India," *Journal of Infrastructure Development* 7, no. 1 (2015): 2-5.

or machines, and its uniquely rugged, almost entirely mountainous terrain challenged economic development efforts. A Vakhsh valley construction foreman based in Kafir Kala in 1932 complained that "in all of our work, the one daily difficulty that the central administration is unable to resolve is transportation."[45] In 1934, the newly established Vakhsh System Administration found that present conditions of transportation still prevented effective governance. "The precariousness of automotive transportation also slows, and at times renders impossible, timely monitoring of regions where construction and other economic activities are underway."[46]

In the early 1930s, animal transportation was favored to that of automobiles because it often proved more able and reliable on the available, ungraded, often treacherous roads and pathways—or a lack thereof.[47] Trucks and tractors, one historian points out, "quickly broke down because of the conditions of roadlessness [of southern Central Asia and Tajikistan]."[48] One higher official asserted that the state's expectation of poorly maintained and under-fueled machines to drive this terrain was in effect "perpetrating a crime against drivers."[49] During the early 1930s, about half of the 100-150 automobiles held by Vakhshstroi at any one time were in need of repairs. Its head engineer explained that "due to the poor quality of roads, as well as the bad quality of the automobiles themselves, the machines quickly fall out of commission. The average run of an automobile prior to needing basic [capital] repairs is five thousand kilometers."

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[45] Report addressed to the Central Asia Bureau, attributed to M. V. Shutov, 18 September 1932, in "Kafir Kala, Zone 1 of the Vakhsh valley resettlement project," RGASPI, f. 62, op. 2, d. 2768, l. 67 (full document is ll. 65-68).

[46] TsGART, f. 268, op. 1, d. 94, ll. 36-37.

[47] See, for example, "Explanatory note on the summary of operations of 30 September 1931," addressed to Bauman and Manzhara of the Central Asia Bureau, signed by Kalizhniuk (Deputy Head of the Vakhsh Agro-Industrial Complex), 5 October 1931, RGASPI, f. 62, op. 2, d. 2523, ll. 42-43 (full document is ll. 39-44).

[48] Nazrulloev, *Dorozhnoe stroitel'stvo*, 62.

[49] RGASPI, f. 62, op. 2, d. 2523, l. 61.

In fact, he alleged that eight percent of automobiles experienced significant problems during their first run.[50] Horses, camels, and donkeys had been available to shipping operations within the rugged territory from the start. They transported some commodities all the way from Termez, the Amu Darya and rail hub city in southern Uzbekistan. But neither these animals nor the carts they occasionally pulled could handle the large heavy cargoes they sometimes received.[51] Such loads were often critical goods, such as timber and machines. Furthermore, there were never enough of the animals on hand to support shipping. Those that were present could rarely meet basic norms of productivity (forget the high demands of the project) because imports could not even provide them with the standard minimum allotment of five kilograms of imported fodder per day. Sources of fodder within the republic were not able to supplement external ones, as might be assumed. In 1931, the cereal producing regions closest to the Vakhshstroi were from 100 to 200 kilometers away from work sites, beyond mountain ridges in Kulob and Hissor, accessible by routes that were only traversable (ironically) by pack animals.[52]

Later, officials blamed the terrain for the low quality of the Southern Railroad itself. One report claimed that "the restless topography of the Vakhsh valley predetermined the profile of the [railroad's] route, and that is why sixty percent of the route consists of curves" having a minimum radius of two hundred meters.[53] The Vakhshstroi's dependency on the center exacerbated topographical challenges to the construction of railroad. In September of 1931, construction was slowed because long-awaited rails that had been shipped from Leningrad were

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[50] The average viability of a repaired car changed drastically by season: four thousand kilometers in the summer and winter, and ten thousand during the spring and fall. See RGASPI, f. 62, op. 2, d. 2523, l. 42; and RGASPI, f. 62, op. 2, d. 2782, l. 57.

[51] Nazrulloev, *Dorozhnoe stroitel'stvo*, 62.

[52] RGASPI, f. 62, op. 2, d. 2523, l. 39.

[53] TsGART, f. 20, op. 2, d. 943, l. 4. Nazrulloev claims that the first 14 kilometers in particular were constructed through relatively "unknown territory, hard soil, and rugged terrain." See Nazrulloev, *Dorozhnoe stroitel'stvo*, 63.

now held up at the port of Termez. Not only were they delayed, but an insufficient number had been dispatched as well. "The situation with crossties is even worse," explained the deputy director of the Vakhshstroi. Crossties had to be processed from timber elsewhere, and could not be made on location. By September, however, only eight of the two hundred expected wagonloads—carrying 120,000 crossties—had arrived at all.[54] The pace at which the railroad's basic building blocks were imported slowed work considerably and led managers to improvise with what was at hand.

Anticipating such problems in dire conditions, some engineers and managers had warned that the endeavor was too ambitious for this territory, while economists of the State Planning Committee (Gosplan) of the USSR called it "financially irrational" on the same grounds.[55] Supporters of Vakhshstroi ignored them, and instead emphasized that it would be implemented in a lower foothills region of the republic, and that conditions here were better suited to growing Egyptian cotton than almost anywhere else.[56] Like post-WWII commentators on the enterprise and its vicinity, they claimed that water delivery could be accomplished cheaply because the terrain presented minimal technical challenges. To them, it was simply a matter of harnessing the momentum of mountainous waters, with no need to build the dams and tunnels necessary elsewhere.[57]

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[54] RGASPI, f. 62, op. 2, d. 2523, ll. 41-42.

[55] Peterson, "Technologies of Rule," 403.

[56] Order No. 17 (II) of the Vakhsh Irrigation Project, signed by Tolstopiatov (Head fo the Vakhsh Irrigation Project), 14 September 1932, in the settlement of the former "Zone 2," TsGART, f. 268, op. 1, d. 20, l. 141 (full document is ll. 141-47); and RGASPI, f. 62, op. 2, d. 2782, l. 48.

[57] Glushkov, "Voprosy irrigatsii v Tadzhikistane,"145. For an example of a larger work about agricultural development in the Vakhsh Valley that avoids discussion of logistical implications of the physical environment while praising its productivity and potential, see I. N. Antipov-Krataev et al., *Pochvy vakshshskoi doliny i ikh* melioratsiia (Stalinabad: Tadzhikskii filial akademii nauk SSSR, 1947). One commentator of the 1960s pridefully claimed that the ubiquitous challenges to daily life in Tajikistan were no obstacle. "Difficult work conditions—the heat, drought, roadlessness, the dusty fields, and the collapsing loessial soils—did not stop Soviet irrigators." See S. I. Dzhuraev, "Razvitie irrigatsii sovetskogo Tadzhikistana, *Khlopkovodstvo*, no. 10 (1964): 27.

But officials who were intimately involved in implementing Vakhshstroi increasingly saw transportation as a greater priority than water management. The reasoning was simple: building canals and other developments depended on supplies arriving at construction sites. In June 1932, Vakhshstroi's head engineer, Syromiatnikov, qualified his positive assessment of its prospects the way economic officials had since before the creation of Tajikistan: "the only difficulty is that of connections, both within this enormous territory, and with the outside world."[58] Such concerns had turned into lessons for one analyst at a 1933 conference on Tajikistan's economy.

> Vakhshstroi's experience teaches yet another thing: large jobs should never be launched without serious and complete preliminary preparation. This has particular significance for distant locales lacking transport infrastructure, a labor force, construction materials, foodstuffs, fodder, fuel, power—where there is nothing on site but water and soil, and everything else must be brought and distributed and managed. It is clear that the fundamental element for the implementation of the preparatory period is the construction of transport infrastructure and the organization of transportation. Until this is done, there is no point in even initiating preparatory work, to say nothing of basic construction.[59]

The analyst captured the central problem of most economic development projects in the new Soviet republic: the fundamental contradiction between native material legacy and Soviet ambition. His summary of the lived and potential bitter consequences—higher costs of construction, massive delays, and rushed, wasteful, low-quality work— characteristically excluded attendant human and animal suffering that accompanied such brash enterprises.[60]

His criticisms, however, were addressed to the large-scale planners of Gosplan, based outside Tajikistan in Moscow. Vakhshstroi officials on site prioritized the Southern Railroad as a

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[58] RGASPI, f. 62, op. 2, d. 2782, l. 48.

[59] Glushkov, "Voprosy irrigatsii v Tadzhikistane," 146.

[60] The author also pointed out that officials were only beginning to seriously consider using canals for organized transportation at the time of writing in 1933. Glushkov, "Voprosy irrigatsii v Tadzhikistane," 145-47.

lifeline to the larger complex under development; or as Vakhshstroi's Chief, Tolstopiatov, referred to it in September 1932, "the most important nerve" of the entire enterprise.[61] When the second year of the project began, managers explained that delays in the erection of buildings, and general failure to complete sixty percent of goals for that year, was due to transportation problems and an incomplete railroad.[62] They appealed to the Soviet preference for railroad as a means of transportation and requested more related shipping resources on the grounds that they might not otherwise meet the new, extended deadline for completing the main canal in the fall of 1933.[63] Syromiatnikov grudgingly lobbied Moscow by appealing to global awareness of Tajikistan's dependency in his bid for a minimum of two locomotives, five new excavator buckets, and ninety automobiles. He was openly concerned that the low productivity he attributed to not having these things would lead upper-level officials to punish the project by withholding promised equipment in future budgeting periods. If they did not receive critical means of shipping, he threatened, "do not expect water to run in the main canal by the fall of 1933, nor [a fruitful] agricultural season for the entire following year."[64]

It was officials like him, on the ground, tasked with implementing the Vakhshstroi project, who made the railroad the focus of transportation in southernmost Tajikistan, against the intentions of central authorities. Enterprises of all sorts throughout the Vakhsh River region prized the growing rolling stock of the Southern Railroad because it helped overcome challenges to other forms of mobility. Locomotives, wagons, and excavators animated its rails even as the line was being constructed. Shipping agents serving other projects found ways to use these tools

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[61] TsGART, f. 268, op. 1, d. 20, l. 142.

[62] RGASPI, f. 62, op. 2, d. 2782, ll. 41, 49.

[63] Hunter, *Soviet Transportation Policy*, 42; and Leslie Symons and Colin White, eds., *Russian Transport: An Historical and Geographical Survey* (London: G. Bell and Sons, Ltd., 1975), xx.

[64] RGASPI, f. 62, op. 2, d. 2782, ll. 56-59.

of the railway immediately, setting the foundations for regional commodity chain dependence on this line. In 1933, the railway owned three steam-powered locomotives, and a growing park of platform cars that totaled 118 by 1937. These, with the help of three excavators, allowed the railway to do heavy lifting at a scale and pace that other means of shipping could not. They expedited distribution of loads of machines, timber, and metalworks to trucks and tractors farther up the rails, which in turn made deliveries to farms, towns, or other sites.[65] Of course, they frequently faced the mobility challenges that I have discussed in earlier chapters, such as seasonal runoff, and disorganization of supply-side cargo arrival. When they were able to work on their own terms, however, the three locomotives reportedly outperformed expectations at a rate of one hundred and twenty-three percent fulfillment.[66] These advantages were well-known to other regional economic organizations managing various kinds of construction and development endeavors, as well as the shipping agents who served many of them. They were under the same Stalin-era pressure as Vakhshstroi to exact substantial progress in their respective projects.

Remarkably, these other enterprises found ways of accessing the Southern Railroad while it was still under construction. As legs were built, regional shipping operations reorganized to take advantage of locomotive hauling capacity. Even the first stretch, a mere sixteen kilometers—completed by the original September 1931 deadline for the entire line—immediately came into use. Locomotives and other devices traveled its rails, hauling materials

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[65] RGASPI, f. 62, op. 2, d. 2523, l. 41; and RGASPI, f. 62, op. 2, d. 2782, ll. 52-53. Two of the locomotives' engines were hybrids capable of also running on gas power. See TsGART, f. 20, op. 2, d. 943, l. 5; and "Finding with respect to Comrade Ashurov's telegram," attributed to Zhurid (Chairman of Gosplan of Tajik SSR) and Andrievskii (of the Transport and Connections Sector of Gosplan), 1936, TsGART, f. 20, op. 2, d. 943, l. 13 (full document).

[66] "Findings based on the report on the Vakhsh Irrigation Project in the year 1935," attributed to Kisel' (Director of the SFG Tajikistan Office of *Sel'khozbank* (Agriculture Bank) and Otstavnov (Representative of the Vakhsh Office of the Sel'khozbank), 1936, TsGART, f. 268, op. 1, d. 94, l. 14 (full document is ll. 2-27).

for many more purposes than its construction alone. They were already busy at work advancing larger loads inland from the Amu Darya for transfer to other forms of transportation up the short line.[67] Officials of all sorts soon came to depend heavily on the railroad as a supplement to other transport.[68]

Not only did managers of all sorts independently seek ways of using the railroad's capacity in the difficult physical environment of southern Tajikistan. The central shipping administration of the republic ordered commodity chain agents to do so. Already in early 1931, the Transportation Union (Soiuztrans), the organization responsible for managing shipping agencies and activities in Tajikistan, instructed subordinate agencies to plan on updating their delivery schedules in a way that incorporated the railroad, and it anticipated the need to reorganize administration of shipping with new coordination challenges associated with "mixed" shipping that used various means of transportation on water, rail, and road within the southern region. It directed hauling organizations to channel traffic headed to southern regions towards the railroad.[69]

Freightage workers would increasingly access the Southern Railroad using rafts and barges that traveled on the Amu Darya from Termez in southern Uzbekistan to Panji Poyon. Virtually all of the supply for this region entered the republic through the rail and river hub city of Termez. The commodity chains of Tajikistan in the first half of the 1930s were in a state of constant restructuring. They relied heavily on semi-autonomous cooperative workgroups (artels)

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[67] RGASPI, f. 62, op. 2, d. 2523, l. 40; and RGASPI, f. 62, op. 2, d. 2782, ll. 65-66.

[68] Order No. 116 (II) of the Vakhsh Irrigation Project, signed by Tolstopiatov (Head of Project), 2 December 1932, in the settlement of the former "Zone 2," TsGART, f. 268, op. 1, d. 20, l. 58 (full document).

[69] Message from Comrade Zavina, Director of the Tajikistan Regional Office of the Transportation Union (Soiuztrans) to many trade and economic organizations, 28 February 1931, TsGART, f. 18 (Council of People's Commissars of the Tajik SSR), op. 1 (1929-1939), d. 216, l. 29 (full document).

that the USSR had been all but phased out in Russia and elsewhere, including Kazakhstan.[70] The state generally operated them on the basis of improvised and semi-legal arrangements—whatever it took to get the job done. Here, artels serving economic organizations other than Vakhshstroi rented access to the Southern Railroad by entering into short-term agreements with its administration to pay for transportation services.[71]

Soiuztrans' order instructing the use of the line is significant because its unilateral authority over shipping transportation did not officially extend to any railroads. Vakhshstroi, like other organizations of this time, engaged in such semi-legal practices as selling its service in order to acquire needed supplies, or even cash to pay wages. Shipping organizations, however, often failed to compensate Vakhshstroi, and the railroad lost money by providing transportation services. Other agencies, if they actually paid up, always paid too little for the service.[72] In disputes between the railway and its external clients, which were handled by arbitrage courts of the Tajikistan's Council of People's Commissars (SNK), the arbitrator always found in favor of the clients (about funds owing, or other violations of railway laws). This led to greater efforts to set contracts in advances of rendering services—which in turn further slowed railway traffic.[73]

The confusing, semi-official character of shipping in Tajikistan throughout the decade highlights the significance of engaging with real material conditions and operations of infrastructure in addition to announcements of their construction and discourses about their symbolic value. My engagement with the physical environment discussed in Soviet state sources

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[70] Hiroaki Kuromiya, "Workers' Artels and Soviet Production Relations," in *Russia in the Era of NEP: Explorations in Soviet Society and Culture*, ed. Sheila Fitzpatrick, Alexander Rabinowitch, and Richard Stites (Bloomington: Indiana University Press, 1991), 72-80; Matthew J. Payne, *Stalin's Railroad: Turksib and the Building of* Stalinism (Pittsburgh: University of Pittsburgh Press, 2001), 228-30, 297.

[71] TsGART, f. 20, op. 2, d. 943, ll. 51-55.

[72] TsGART, f. 20, op. 2, d. 943, ll. 51-52.

[73] TsGART, f. 20, op. 2, d. 943, l. 55.

about economic development promotes an understanding of which local dynamics drove the Vakhshstroi and other regional processes, along with a better sense of *when*. Usage of the railroad as it was being constructed is the reason why various accounts—contemporary and scholarly—claim that the line began full operations in March of 1932, when it reached the main canal. In fact, it only began regular operations after they reached Qurghonteppa sometime in mid-1934. Its branch line to Jilikul was only completed in 1935.[74] The received periodization of the larger agricultural complex is murky. It was originally planned in "stages," and later accounts have variously addressed "phases" of construction, accomplished or delayed. I have not seen any of the original planning documents, making it difficult to decipher interpretive claims and what stakes they represent. Some things, though, are clear. Vakhshstroi finished building the main line of the railroad in 1934, about three years later than desired. In the eyes of managers, this affected other aspects of construction, including postponing the opening of the main canal to the fall of 1933 and the main branch canals to a year later.[75]

Over the course of the 1930s, various officials had continued warning that both the Vakhshstroi and central Tajikistan administrations were failing to see the significance of the railway in republican development, even as it was doing quite a lot of work for them.[76] One alleged that "the operational potential of the light rail line is much higher than projected, as is corroborated by the easy yearly fulfillment of the plan for shipments."[77] Ironically, the Southern

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[74] Resolution of the SNK of the Tajik SSR "On the transfer of the Vakhsh narrow gauge railroad to the SNK of the Tajik SSR," signed by Rakhimbaev (Chairman of the SNK of the Tajik SSR) and Imamov (Chief Administrator of the SNK of the Tajik SSR), April 1937, in Stalinabad, TsGART, f. 20, op. 2, d. 943, l. 2 (full document is ll. 2-3); and Nazrulloev, *Dorozhnoe stroitel'stvo*, 65-66. Some sources claiming otherwise include the following: "The Vakhsh Valley Project," 265; and TsGART, f. 20, op. 2, d. 943, l. 41.

[75] RGASPI, f. 62, op. 2, d. 2782, l. 58; and Masov, ed., *Noveishaia istoriia,* 576.

[76] For example, TsGART, f. 20, op. 2, d. 943, ll. 52-53.

[77] TsGART, f. 268, op. 1, d. 94, l. 14.

Railroad was now a *de facto* greater service to the wider region than to the complex it was built for. Usage of the line by other organizations rose steadily between 1933 and 1936, while it decreased somewhat on the part of Vakhshstroi. Unrelated enterprises came to provide the majority of the workload for the railroad. Shipping agencies, including those serving timber, fuel, and cotton transportation, increasingly used the railroad for operations that had little or nothing to do with the Vakhshstroi project itself. Other organizations' use of the line grew significantly between 1934 and 1936, from about a quarter of traffic to a little more than half.[78] For this reason, an SNK report of 1937 explained that "the narrow gauge railroad of the Vakhsh irrigation project, starting in 1933 as a narrowly purposed, secondary concern, grew into an enterprise serving the transport needs of the entire Vakhsh valley."[79]

The developing geography under Stalin in southern Central Asia

Tajikistan's Union for Cooperative Transportation (Promkooptrans), a subsidiary organization of Soiuztrans, had anxiously awaited the chance to take advantage of the Southern Railroad during planning stages. Its desire to use any potential railroad for commodity transportation in Tajikistan in order to expedite shipments was longstanding and had been thwarted before. SNK had denied Promkooptrans access to the Termez-Stalinabad Railroad, the first ever in the republic, when it was completed in 1929. As a result, the shipping agency had poured its energy

[78] TsGART, f. 20, op. 2, d. 943, ll. 7, 51.

[79] TsGART, f. 20, op. 2, d. 943, l. 2.

into transferring cargo into southern Tajikistan by way of the Amu Darya, also creating the need to purchase and maintain watercraft at great expense.[80]

SNK and Soiuztrans directives ordering southward passage of commodities were and are confusing, even if their main motive was the desire to simplify a complicated shipping regimen. Substantial evidence exists of prior and contemporary factors that should have interfered with these orders. While shipping to Vakhshstroi and other southern enterprises was explicitly directed through the Amu Darya corridor, earlier and larger road transportation projects to the north had always been promoted as a way to serve those same, southern regions. Officials who lobbied the state for aid to the construction of the Termez-Stalinabad Railroad had emphasized that it would enable commodity flows in and out of the developing cotton centers south of the capital. The same logic was used to sell the various iterations of the Stalinabad-Qurghonteppa road project, finally completed as a one hundred-kilometer highway in 1933. As late as the end of 1932, however, Tajikistan's Soiuztrans continued ordering shipping organizations to move commodities slated for the southern regions through Termez, and from there on the Amu Darya to the city of Panji Poyon, where they could be transferred to the railroad or other means of transportation.[81] These directives dismissed the fact that Vakhshstroi, unlike other regional enterprises, even had its own dedicated official "supply base" to the north in Stalinabad, in addition to ones in Termez and Panji Poyon.[82] Soiuztrans warned commodity chain agents

[80] "Synopsis of a report addressed to the Tajikistan Republican Congress of Promkooptrans [Tajikistan's Union for Cooperative Transportation] Commissioners," 1931, TsGART, f. 18, op. 1, d. 216, ll. 204-205 (full document is ll. 203-211).

[81] Order No. 24 (II) of the Vakhsh Irrigation Project, signed by Artykbaev (Deputy to the Head of Vakhshstroi), 11 February 1932, in Qurghonteppa, TsGART, f. 268, op. 1, d. 20, l. 300 (full document).

[82] TsGART, f. 268, op. 1, d. 20, l. 300.

serving the grand agro-industrial project that they would be fined if they traveled through the capital.[83]

The Southern Railroad's central gravity in the new, roadless republic made it the unintended driver of the developing geography of Soviet mobility in the southern regions of Tajikistan. Studies of infrastructure show that various kinds of roads, and their auxiliary parts, "mediate" social relations of states by facilitating or inhibiting movement, its direction, as well as intention and potential.[84] Chandra Mukerji explains that "state infrastructure, land use practices, and regulations of resources affect the social order in subtle but consequential ways."[85] Roads like Vakhshstroi's railway were tools of governance and change, alongside collectivizing farms, mass industrial projects, and guns. The story of the Southern Railroad also fits global infrastructure patterns because once construction started, its presence irreversibly impacted the physical environment of the territory of Tajikistan by creating new, often unpredictable opportunities for mobility.[86] Mukerji elaborates, pointing out that "built environments exert powers, silently changing the ground on which political struggles take place and defining conditions of possibility for collective life."[87]

Thus, while roads projects may be initiated with a particular purpose and vision, the real interactions, usages, and dependencies it encounters and fosters are not easy to delimit.

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[83] TsGART, f. 268, op. 1, d. 20, l. 92.

[84] Alexander Badenoch and Andreas Fickers, "Europe Materializing? Toward a Transnational History of European Infrastructures," introduction in *Materializing Europe: Transnational Infrastructures and the Project of Europe*, ed. Alexander Badenoc and Andreas Fickers (New York: Palgrave Macmillan, 2010), 12-13.

[85] Chandra Mukerji, "The Unintended State," in *Material Powers: Cultural Studies, History and the Material Turn*, ed. Tony Bennett and Patrick Joyce (New York: Routledge, 2010), 81-82.

[86] See, for example, Jamie Monson's discussion of the unanticipated uses of the Chinese-built Tanzania Zambia Railway Authority (TAZARA) railway, in *Africa's Freedom Railway: How a Chinese Development Project Changed Lives and Livelihoods in Tanzania* (Bloomington: Indiana University Press, 2009), 148-49. See also, Bogart, "Glorious Revolution," 1074.

[87] Mukerji, "The Unintended State," 81-82.

Vakhshstroi officials' demands for the means to build and conduct activities on the tracks had not officially included plans to serve other organizations. Discourses and theories about land transportation infrastructure rarely, however, have actual deterministic power. Roads exist in dynamic relation to a constellation of other factors that are often hard to control or anticipate, especially in poor regions.[88] The Southern Railroad became desirable to enterprises across economic sectors because it moved goods more reliably and more cheaply than other forms of transportation. Furthermore, Soiuztrans and its brigades of shipping agents saw this railroad as an opportunity and made it part of their ever intensifying cargo hauling activities. On southern Tajikistan's rugged terrain, the viability of any enterprise of the region was conditioned by material dependency, on access to commodities and transportation infrastructure.

The stops along the Southern Railroad came to influence the development, regions, and directions of these growing networks of intensifying mobility. In fact, M. Saidov goes so far as to argue that the narrow gauge railway even opened up regions that were little inhabited.[89] Over the course of the 1930s, settlements neighboring the line gained prominence through operational significance directly related to shipping. For example, a December 1932 inventory commission's plan and geographic schedule of activities identified supply depots of regions primarily by areas of development. At that time, they were referred to as the "main site," the first to sixth work zones (*prorabstva*), the "former second site," the Stalinabad base, and the Termez base.[90] By 1937, SNK saw the seven key stations of the line extending from Panji Poyon as the "five main

[88] Demenge, "Development Theory," 2.

[89] M. Saidov, "Trudiashchiesia Tadzhikistana v bor'be za osvoenie Vakhshskoi doliny i sozdanie v nei bazy tonkovoloknistogo khlopka" (Avtoreferat dissertatsii na soiskainie uchenoi stepeni kandidata istoricheskikh nauk, Stalinabadskii Gosudarstvennyi Pedagogicheskii Institute im T. G. Shevchenko, 1956), 10.

[90] Order No. 132 (II) of the Vakhsh Irrigation Project, signed by Tolstopiatov (Head of Project) and Dulitskaia (Administration Secretary), 16 December 1932, in the settlement of the former "Zone 2," TsGART, f. 268, op. 1, d. 20, l. 45 (full document).

regions of the Vakhsh valley."[91] These regions were now defined not only by the railroad stations, but also by other loading points like the sites of sidings, as well as by how the material and economic character of their regions concerned the railroad as objects of in- and outbound mobility. Their stations were now known by names and by their distance from the Amu Darya. The regions they served were important in relation to the railroad because of what forms of mobility they had available and by what economic organizations would need coordinated transportation services. The first region of passage, for example, contained three stations and one siding. The Kalniniskaia Station, forty kilometers from the river, was defined by a Cotton Base and a Machine and Tractor Station (MTS) office of the same name, and a "newly constructed city of Voroshilovsk." In the next contiguous region by the name of "October," the railroad stopped in the city of Vakhshstroi, which contained a warehouse for seeds, as well as at the Tasharabatskii Cotton Base at the sixty-eight kilometer mark. Although October was important because of its product, it still lacked access roads, and even a crossing. The Jilikul and Qurghonteppa regions consisted of stations and cities by the same names, and were defined by robust administrative and material infrastructures, "with all of its [their] organizations, institutions, and enterprises." Qurghonteppa was distinguished by the presence of a cotton gin, a mill, and oil storage.[92]

The growth of these locations of settlement within the Vakhsh valley was directly related to, and co-constitutive of, the growing importance of Termez and Panji Poyon to the Southern Railroad. These two Amu Darya port cities became the primary through-points for goods traveling in and out of Tajikistan's southern regions served by the railroad. Their role in the

[91] TsGART, f. 20, op. 2, d. 943, l. 2.

[92] TsGART, f. 20, op. 2, d. 943, ll. 41-42, 47-48.

transportation of supplies by river to the republic rose rapidly in 1930 when Soviet agricultural development efforts increased in southern regions of the newly independent republic, and they came under stresses similar to those affecting other points of rapid economic growth.[93]

Despite their roles as commodity destinations and through points, these hub cities shared many of the same challenges as areas along the Vakhshstroi line and in the rest of southern Tajikistan and Central Asia. Most urgently, their residents faced many of the same dire material conditions. Laborers at Termez, Panji Poyon, and throughout the Vakhsh river region lacked adequate housing, in addition to facing food and wage shortages, and other privations. Throughout the 1930s, though, conditions were worse in the Vakhsh valley. Enterprises there never received the thousands of tents and yurts they hoped to obtain to support a starving workforce. Officials openly complained that it was difficult to oblige their charges to do difficult work if they could not provide them with sustenance, lodging, or basic equipment like boots. A Vakhshstroi report of 1936 explained that "of the four hundred qualified carpenters who were imported, only one hundred and twenty are employed in their area of specialization, while the others do general work as they await the arrival of timber and nails." These conditions are confirmed by Soviet press accounts of how the second stage of the project in 1954 and 1955 contrasted with material conditions of the first stage. They pointed out that, in the past, much of the work of Vakhshstroi had been completed with people's hands, and that they lived in harsh conditions, in tents if they were lucky, and without if they were not.[94]

A major cause of these conditions in the Vakhsh River valley was the disarray and pile-

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[93] *See*, for example, Message addressed to the Central Asian Administration of Union Oil (*Soiuzneft*) in Tashkent, attributed to Narkomtorg Tajik SSR, signed by Kuz'min (Narkomtorg Board Member) and Drondin (Inspector), 22 December 1930, TsGART, f. 18, op. 1, d. 14, ll. 278-279 (full document).

[94] Peterson, "Technologies of Rule," 424; and "The Vakhsh Valley Project," 266.

ups of commodities at hub cities. The physical infrastructure of Termez and Panji Poyon was insufficient for the task of managing bulk loads of goods, which often needed reorganization for distribution. Construction was a constant feature of these river cities, though it was itself often delayed due to a shortage of supplies available to agencies that managed cargo bases themselves. In September of 1931, officials were distressed because eighty tons of steel products were piled at the Panji Poyon port. These commodities were allegedly a mess because the city lacked the timber to build appropriate temporary storage structures. In fact, the docks here were still under construction.[95] Termez faced the same kinds of problems with holding space throughout the decade. In late 1937, the city's base of Tajikistan Matlubot, a mass commodity provider, still lacked rather basic structures to manage the growing amounts of incoming cargo it distributed to eighteen MTS points in southern Tajikistan. Explaining that it did not own any dedicated storage facilities in Termez, it lobbied the republic's SNK for an open shed structure (covered by canopy) to use as storage for timber and manufactured goods, and it also requested a storage yard that had a basement warehouse.[96]

The changing geography of commodity chain infrastructures extending from southern Uzbekistan to the outer reaches of the Vakhsh valley could not keep pace with the material needs of Soviet economic ambitions. At the Termez and Panji Poyon ports, transferring cargo between different types of transportation was a complicated affair that required more than the coordination of laborers and rafts and automobiles and animals. As the size and number of total shipments grew through the 1930s, hauling organizations acquired greater numbers of offloading

[95] RGASPI, f. 62, op. 2, d. 2523, ll. 41, 43-44.

[96] Message titled "Request for permission for construction on the docks," addressed to the Commandant of Termez, signed by Vykov (Head of Base No. 2 for Tadzhikmatlubot), received 25 September 1937, TsGART, f. 429 (The Termez Base), op. 2 (1935-1940), d. 1, l. 42 (full document); and M. Dinorshoev, "Tajikistan," in *History of the Civilizations of Central Asia*, ed. Madhavan K. Palat and Anara Tabyshalieva, vol. 6 (Paris: UNESCO Publishing, 2005), 295.

platforms, docks, lots, and storage facilities that need to be connected by such infrastructures as service roads and railroads, as well as bridges. All of these structures, and the growing number of people, animals, and machines that traveled them also required constant support—in the form of materials, cash, and credit—and maintenance in order to remain viable.[97]

The consequences of insufficient infrastructure to manage goods at the hubs were smaller reflections of greater problems further down the commodity chain. As late as 1937, the Southern Railroad had few buildings with which to house either the administration or the laborers of the railroad. Vakhshstroi's head engineer at the time explained that "there had been no special construction of office, residential, or warehouse buildings" because of a belief that this would serve rapid railway construction and usage and the rapid start-up of Vakhshstroi. Of the two departmental office buildings it planned to construct in Panji Poyon, only one was started, and still only thirty percent complete by then.[98] A more important operational problem was the fact that the railroad point Panji Poyon had to share a single telephone line, established in 1931, with other enterprises of the Vakhsh valley involved in "construction, development, the railroad, etc." According to regulations, its intended use to allow for various enterprises representatives to report to head officials in the valley or in the capital according to a regular schedule. Railway and port officials requested a dedicated line because they were concerned that sharing one was making it difficult to effectively operate loading and offloading at the river, hauling on the

[97] Message addressed to Comrade Khodjibaev (Chair of the SNK Tajik SSR and Deputy Chair of the Central Asian Economic Council (SredazEkoso), no. 6573, attributed to the Termez Office of the State River Fleet of Central Asia, 3 December 1930, TsGART, f. 18, op. 1, d. 14, l. 412 (full document); TsGART, f. 268, op. 1, d. 94, ll. 78-80; Message addressed to the Chairman of the Committee on Shipping of the SNK Tajik SSR, and to Comrade Poluian (Chairman of the Soiuztrans Board), attributed to Sanzhar (Manager of the Tajikistan Regional Office of Soiuztrans, 17 April 1931, TsGART, f. 18, op. 1, d. 216, l. 202 (full document); and Addendum No. 2 of the Tarriff agreement for shipping on the Vakhshstroi narrow gauge railroad, on the "Norms of freight handling on the Vakhshstroi narrow gauge railway," signed by Osadchii (Railroad Chief) and Nektorov (Head of the Operations Department), 17 February 1937, TsGART, f. 20, op. 2, d. 943, l. 40 (full document).

[98] TsGART, f. 20, op. 2, d. 943, l. 6.

railway, and coordinating operations with other agencies and activities throughout the region.[99]

The material conditions of shipping in the ports and on the railroad are important because officials believed they were a key cause of equally great problems in labor and administration of logistics. At Termez, Panji Poyon, and regions of the railroad, the laborers were seen as more prone to delinquent behavior. As in the case of transportniki I discussed in Chapter 3, officials involved in Vakhstroi were concerned that there were few options for improving the situation since it was hard to reprimand people working in these critical transit spaces.[100]

Shipping personnel at the river hubs had influence within the region that was in many ways far greater than officially accorded. They worked in sites where power was as diffused as the rest of the commodity distribution system. No higher authorities had clear consistent control of traffic. In fact, several shipping organizations had local hub offices with exclusive juridiction and use of their own, or shared, docks, storage facilities, and equipment.[101]

Central Tajikistan authorities in Stalinabad knew about such problems and worked to exert authority on southern economic development and shipping. In 1935, Tajikistan's SNK deployed a representative to investigate activities at Termez and Panji Poyon. This Comrade Liubman's assessments and recommendations showed that many of the same problems persisted

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[99] RGASPI, f. 62, op. 2, d. 2523, ll. 40; and Order No. 121 (II) of the Vakhsh Irrigation Project Administration, signed by Tolstopiatov (Head of Project), and certified by signature of Dulitskaia (Administration Secretary), 14 December 1932, in the settlement of the former "Zone 2," TsGART, f. 268, op. 1, d. 20, l. 53 (full document); and TsGART, f. 268, op. 1, d. 94, l. 37.

[100] RGASPI, f. 62, op. 2, d. 2523, ll. 43, 60; and Order No. 158 (II) of the Vakhsh Irrigation Project, signed by Tolstopiatov (Head of Project), and certified by signature of Dulitskaia (Administration Secretary), 31 December 1932, in the settlement of the former "Zone 2," TsGART, f. 268, op. 1, d. 20, ll. 16-17 (full document is ll. 1-20); Order No. 64 (II), handwritten in pencil, signed by Tolstopiatov (Head of Project), and certified by signature of Grigorov, December 1932, TsGART, f. 268, op. 1, d. 20, ll. 106a-b (full document); and TsGART, f. 268, op. 1, d. 94, ll. 14-15, 37, 81.

[101] Message addressed to the Termez Base of Tadzhikmatlubot, no. 266, attributed to Fliukov (Deputy Secretary of Commodity Circulation for Tajikistan Society of Consumers known as Tadzhikmatlubot) and Mukhin (Deputy Head of the Transport Section of Tadzhikmatlubot), 4 April 1931, TsGART, f. 18, op. 1, d. 216, l. 147 (full document).

through the decade. They also suggested that some of the problems had been perpetuated by a lack of responsiveness, or ability to respond, on the part of officials in Stalinabad. He called for improved material conditions in general, and for expanding service roads and rail connections, and addressing fleets of watercraft in disrepair. But in late 1935, he lamented that such recommendations, "to date, have not received a response."[102] The next priority, for Liubman, was establishing a clear hierarchy of authority among various agencies. He argued that pile-ups could only end if his employers were to appoint a single official empowered to manage logistics at hubs.[103] "It may be that the carelessness of local organizations with respect to shipments headed for southern Tajikistan have something to do with" the lack of clear authority and the fact that higher officials would only visit temporarily.

His observations corresponded to the fact that Vakhshstroi and other enterprises throughout the Vakhsh valley tried to overcome confusion at hubs by appealing to abstract, Stalinist structures of authority. Their officials commonly wrote their Termez and Panji Poyon bases to ensure, restart, or plan shipments to points beyond the railroad.[104] In the fall of 1931, for example, Vakhshstroi's Director of Supply, based in Qurghonteppa, expressed concerns about the lack of cargo and fuel reaching work "sites and farms." In his view, the problem could be solved through better coordination by the complex's supply base at Panji Poyon and a more effective deployment of means of transportation to Termez for loading. The director's instruction to the manager of the supply base, however, revealed the considerable influence that came with

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[102] Message in response to the telegram of 17 February, addressed to Comrade Kaktyn' of the SNK Tajik SSR, attributed to Liubman (Representative of the SNK Tajik SSR), 19 April 1935, in in Termez, TsGART, f. 18, op. 1, d. 931, l. 57a (full document is ll. 57a-58b).

[103] TsGART, f. 18, op. 1, d. 931, l. 57a; and Message addressed to Comrade Kaktyn' of the SNK Tajik SSR, attributed to Liubman (Representative of the SNK Tajik SSR), 17 February 1935, in Termez, TsGART, f. 18, op. 1, d. 931, l. 61 (full document is (ll. 60-61).

[104] TsGART, f. 18, op. 1, d. 216, l. 147.

controlling traffic. He patronized his subordinate by pointing out that surely his Panji Poyon operation also was lacking supplies and by pointing out that slow imports were also slowing down the construction of the railroad. His rather specific instructions furthermore demonstrated the fragility of commodity chains between Termez and Vakhshstroi sites. He ordered that shipments must travel fourteen kilometers by rail, at which stage they should be picked-up by "inbound automobiles, carts, or tractors carrying cargo." These, he underlined, should never travel without additional fuel cargo. The security of shipments, meanwhile, was to be ensured by notifying the Qurghonteppa office of the name of the cargo driver and the kinds of things he was towing.[105]

Liubman's reporting indicated that disorderly shipments and commodity pile-ups at ports still persisted years later. For him, operations at Termez were influential in the continuing and profound disorder that also pervaded daily operations of the local Party organization and agencies of various sectors of the economy.[106] The result was congestion of various kinds of cargo. During one expedition there, "shipments headed to southern Tajikistan accumulated in very significant amounts." In addition to the more than 1,200 cubic meters of cereals and other commodities, the amount of timber destined for Vakhshstroi had grown from three thousand to five thousand cubic meters in just five days.[107] The solution, in Liubman's view, was always the imposition of greater authority. "In order to unify and manage all of the Tajik SSR's organizations that are active in Termez, I request that the TsK KP (b) of Tajikistan send a

[105] "Order No. 22 on the Office of Supply for the Vakhsh Agro-Industrial Complex" signed by Maiboroda (Head of Supply), 21 September 1931, in Qurghonteppa, TsGART, f. 268, op. 2 (1930-1940), d. 2, l. 13 (full document).

[106] TsGART, f. 18, op. 1, d. 931, l. 60.

[107] TsGART, f. 18, op. 1, d. 931, l. 61. Five days was the amount of time that plans allotted to the Deputy Director of the Vakhsh Railway for the organization of loading and offloading activities at Panji Poyon. See TsGART, f. 268, op. 1, d. 20, l. 93.

permanent representative to Termez." The Tajikistan SNK had received similar recommendations from the Termez Regional Committee of the Communist Party of the Uzbekistan SSR. What they perceived to be a growing problem "threatens to entirely cut off the planting campaigns in regions of southern Tajikistan supplied through Termez."[108]

Liubman was well-placed to comment on systemic problems because he was also empowered with managing shipping for the SNK at Panji Poyon. Since his employers did not grant his request for the centralization of authority in southern Tajikistan's commodity chains, he was forced to engage in local shipping practices according to norms that existed in the absence of clear authority, order, and infrastructure. Some of these problems were material. He complained that he had no means to effectively communicate with the regions he directed shipments to. His radio frequently failed. And he still lacked permission to travel by boat throughout the region under his purview.[109]

More importantly, this dedicated cadre became involved with illegal, "expediter" shipping agents. These *tolkachi*, as I explained in Chapter 3, were couriers commonly used by Soviet enterprises to overcome shortages and ensure acquisition of needed capital. Their activities and employment were neither avoidable nor legal (because they were unplanned).[110] At a time when the command economy was taking shape, Vakhshstroi's administration evidently resented the anxiety caused by the unofficial expectation that it conduct such illegal economic practices because of the official rebukes it drew and the added stresses it caused. In 1931, the

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[108] "Addendum no. 3 to the Resolution of the Termez Regional Committee of the Communist Party of Uzbekistan (Raikom RK KP (b)," signed by Ibragimov (Executive Secretary of the Termez Raikom RK KP (b), 15 February 1935, TsGART, f. 18, op. 1, d. 931, l. 64 (full document).

[109] TsGART, f. 18, op. 1, d. 931, l. 57a.

[110] Eugenia Belova, "Economic Crime and Punishment," in *Behind the Facade of Stalin's Command Economy: Evidence from the Soviet State and Party Archives*, ed. Paul R. Gregory (Stanford: Hoover Institution Press, 2001), 133-40.

Central Asia Bureau ordered Tajikistan's Procurator to punish the "individuals" responsible for illegally couriering three excavators meant for Chirchikstroi, in Tashkent, to Vakhshstroi.[111] The success of expeditions to seek animal transportation was equally dire in the early years, as attempts to purchase thousands of horses from agencies throughout Central Asia often came up short.[112] A 1932 report complained, that "the enterprise has exhausted all legal options available for rapid acquisition of locomotives."[113] While Liubman's messages to SNK revealed a strong sense for how to improve efficiency of commodity chains, he himself saw no alternative to engaging in such unauthorized practices. In a message to a colleague in Panji Poyon, he promised that he would secure a shipment of timber and cement, but his conscience led him to warn that such practices "will in no way serve to establish Vakhshstroi."[114]

Liubman had been concerned with the apparent randomness with which supplies arrived at Vakhshstroi sites, and he believed that the practice of making such special, illegal efforts for single hauls was causing delays in the project. To him, pile-ups and shortages were often caused by the informal economy of expediter shipping which involved many unplanned and unannounced shipments. These included large "shipments of migrants" who had traveled according to informal agreements with expeditors.[115] The Vakhshstroi, like many other projects, was not successful at attracting Central Asians to the construction endeavor or to the collective farms. Peterson explains that "the same problems that plagued 'Magnitka'—constant replacement of the administration in the early years, huge labor turnover, difficult working conditions—plagued Vakhsh, only magnified. If Russians and Ukrainians felt that the Urals were

[111] RGASPI, f. 62, op. 2, d. 2782, ll. 67-69.
[112] RGASPI, f. 62, op. 2, d. 2523, l. 42.
[113] RGASPI, f. 62, op. 2, d. 2782, l. 56.
[114] TsGART, f. 18, op. 1, d. 931, l. 57b.
[115] TsGART, f. 18, op. 1, d. 931, l. 57a.

the end of the earth, one can only imagine how they felt about Tajikistan, a region that had difficulty retaining even committed party officials."[116] Expediters were key participants in the "recruitment" of labor from other parts of the USSR, yet their activities contributed to massive ineffectiveness in some sectors while allaying it in others.

Despite these difficult, complicated circumstances, increasing shipments were nevertheless making it to their Vakhsh valley destinations, if not always in a manner desired by recipients. In murky, Soviet terms (reproduced in post-Soviet publication), Vakhshstroi's material impact on the region during the 1930s could be measured as "thirty million cubic meters of earth works, the laying of forty thousand cubic meters of concrete or steel reinforced concrete, twenty-two thousand cubic meters of timber construction," along with "many" buildings and roads of various sorts—the result of an investment of some one hundred and fifty-three million rubles.[117] Thanks to the Vakhsh Railroad, shipping organizations had built a constellation of infrastructures to enable the transportation of commodities to sites where the built environment of the state economy was changing rapidly. Soviet figures point to the economic significance of the region, suggesting that it was responsible for fourteen percent of Tajikistan's economic productivity by the early 1940s, after Stalinabad and Leninabad oblasts (regions).[118]

Conclusion

The evolving realities of mobility and its impact on economic growth in the Tajik SSR resulted in higher-level agencies transferring management of the Vakhsh Railroad to the republican SNK

[116] Peterson, "Technologies of Rule," 429.
[117] Masov, ed., *Noveishaia istoriia,* 577.
[118] Dinorshoev, "Tajikistan," 295.

in the spring of 1937.[119] The move was an outcome of shipping and other economic organizations participating in an interdepartmental meeting headed by SNK and Gosplan Tajikistan. These agencies agreed that centralized ownership would lead to better usage the railway, helping to overcome difficulties of fulfilling their shipping quotas using other means of transportation.[120] An SNK resolution justifying its acquisition of authority explained that Vakhshstroi's administration, always considering the railway as secondary to its purposes, had never conducted proper and needed repairs and had failed to add to its rolling stock. As a result, the accusation went, the railway was now in rather poor condition and was failing to fulfill growing needs.[121] The resolution passed, and the commission set out plans to enact significant repairs on the railroad in order to "avoid accidents, as well as to calculate the [true] traffic capacity of the road."[122] The executive institution justified the decision using language about technical issues similar to that used in the construction of the other roads discussed in Chapters 1, 2, and 4, which obscured the complicated history of environmental management related to the line. They blamed the failing Vakhshstroi for the low quality of the railroad, and for not properly serving the transport needs of other organizations, whose right to use the tracks was ambiguous.

This chapter's analysis the 1930s history of the Vakhsh Railroad demonstrates the importance of examining regional economic growth in the USSR by asking what was done, rather than what was not accomplished. I have argued that although the Vakhshstroi project was and is judged to have been a failure, its railroad came to have a regional purpose independent of

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[119] Phoned telegram announcing the 29 March 1937 meeting about the transfer of the Vakhshstroi Railroad to SNK Taj SSR to take place in the office of the Chairman of Gosplan Taj SSR, 28 March 1937, TsGART, f. 20, op. 2, d. 943, l. 1 (full document); and TsGART, f. 20, op. 2, d. 943, ll. 2-3.

[120] TsGART, f. 20, op. 2, d. 943, l. 9.

[121] TsGART, f. 20, op. 2, d. 943, l. 2.

[122] At minimum, the commission estimated that repairs would involve changing about fifty thousand crossties, in addition to setting down actual support linings. See TsGART, f. 20, op. 2, d. 943, ll. 4-5.

this enterprise. I acknowledge the unplanned importance of the railroad by illuminating how it was used and in which ways it was significant to the valley. I ask "what happened?" rather than "what was supposed to happen?" or "what did people say happened?" Material phenomena such as infrastructures are ideal objects for such inquiry because their existence immediately becomes a point of reference for the economic contexts in which they are situated; they have physical impact and cannot be undone. Soviet railroads are a good example of this because they were the preferred and dominant form of mass transportation.

For this reason, this study of the Vakhsh Railroad is an example from the periphery that has broad methodological relevance to future directions in historical study of the USSR. It does not seek to fit the model of center-periphery studies that aim to demonstrate influence of the margins on the "metropole." Rather, this history illuminates dynamics that can inspire reconsideration of and elaboration on more familiar narratives—including those of other grand Stalin-era projects. Knowledge of the transportation causes and effects of situations on the ground can do much to help explain changing conditions, as well as successes and failures.

Available secondary information on the famous Magnitogorsk iron and steel complex in the Ural Mountains region, for example, reveals underexplored implications of roads and transportation. Stephen Kotkin gestures at connected issues of mobility and geography and points out that that delays in the project coincided with postponements in the construction of the 145 kilometer-long railway connecting it to Kartaly.[123] The larger geographic scale and significance of this connection, however, must be derived from reference to other studies. John Scott's memoir about life at *Magnitka* reveals his view that challenges of transportation on the

[123] Kotkin also shows that transportation created hierarchies of ethnic and professional communities in Magnitogorsk, isolating some from others, while it also prevented proper attention to various services. See, Kotkin, *Magnetic Mountain*, 44-45, 131-37.

Karataly railroad—in addition to the lack of connections to major centers—was a specific cause of shortages. He furthermore implied that the quality and safety of this connection also affected supply problems.[124] In fact, studies of transportation under Stalin often conclude that physical connections and geographies of Soviet construction were central drivers of the daily experiences of economic life. Among the clearest examples was Magnitogorsk's dependence on the rail connections (beyond Karataly, via Troitsk) and coal from the Kuznetsk Basin. The relationship could only be sustained by special policy and tariff exceptions.[125] Rees explains that planners for the Urals- *Kuzbass* combine ignored warnings of economists who believed that the real transportation costs between Kuznetsk and Magnitogorsk would be too high. "The official line was, 'the means of transportation on most occasions do not determine the choice of region and sites for the construction of iron and steel works. On the contrary, the construction of the metallurgical works determines the organization of the corresponding system of transport connections.'"[126]

In southern Tajikistan, new opportunities for freightage garnered by the Vakhsh Railroad literally shaped the geography of economic possibility. A greater knowledge of what, or if, actions based in infrastructure on the ground influenced the statements and decisions of planners and managers can lead to a better understanding of state-society relationships and their regional iterations. In Tajikistan, the SNK's acquisition of the Vakhsh Railroad may have led to the line's increased productivity. One estimate suggests that freight turnover rose from 5,680 tonne-

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[124] John Scott, *Behind the Urals: An American Worker in Russia's City of Steel*, enlarged edition prepared and introduced by Stephen Kotkin, orig. pub. in 1942 (Bloomington: Indiana University Press, 1989), 76, 100-102. In fact, Kotkin points out that the speed limit on this line in 1930 was just 10 km/hr because of how shoddy it was.

[125] See J. N. Westwood, *A History of Russian Railways* (London: George Allen and Unwin, Ltd., 1964), 244, 261.

[126] E. A. Rees, *Stalinism and Soviet Rail Transport, 1928-41* (New York: St. Martin's Press, 1995), 29-30.

kilometers in 1938 to 8,466 the following year.[127] This statistic alone suggests that new official permission for previously improvised activities enabled better functioning of an already established geography of shipping and economic growth; alternatively, it may simply reflect a more realistic, now official account of railroad usage.

This history of "Tajikistan's Turksib" recommends ways of expanding knowledge of the Turksib itself. Whereas most of what is known about the original has to do with the period of its construction, research into the relationship between the railroad and other economic phenomena could promote improved understandings of social change and chronologies across the USSR. As J. N. Westwood points out, "the economy of Central Asia was sensibly changed by the construction of this line," although this was not the case until the later in the decade.[128] This observation of what actually happened inspires new questions. For example, did the delay in the usage of the Turksib correlate to the chronology of jams in other economic projects of Central Asia? The Great Ferghana Canal venture of 1939-40, for example, is generally attributed to the colossal forced efforts (and suffering) of laborers on site. It is the best known of fifty-two irrigation projects implemented at roughly the same time in Uzbekistan.[129] Extensive irrigation in the Ferghana Valley and throughout the republic had, however, been an unsatisfied state ambition since the mid-1920s.[130] The history of transportation construction and commodity chains of the larger region of these projects could illuminate physical dynamics that bore on their

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[127] Nazrulloev, *Dorozhnoe stroitel'stvo*, 138-39.

[128] Westwood, *A History of Russian Railways*, 243.

[129] Teichmann, "Canals, Cotton," 512.

[130] Christian Teichmann, "The Economy of Nationality: Stalinism and Irrigation in Uzbekistan, 1924-1941," posted to the Virtual Semninar on Russian and East European history hosted by the South Ural State and Basel Universities, 4 September 2007. Accessed at http://isem.susu.ac.ru/archen/wasser_eng/ on 12 August 2015, 10-11 (of pdf printout); Jonathan Michael Thurman, "Modes of Organization in Central Asian Irrigation: The Ferghana Valley, 1876 to Present" (PhD diss., Indiana University, Bloomington, 1999), 203-22; and Peterson, "Technologies of Rule," 451-66.

realization, and it may indicate dynamic, collective chronologies that specifying causal relationships determining the character and location of completion.

In the case of the Vakhshstroi railroad, the contrast between its intended relationship to the regional economy and its real significance is striking. The unplanned importance of the narrow gauge line facilitated a familiar scale of Stalin-era construction by way of unfamiliar dynamic relationships among diverse, dispersed economic actors cooperating in material exchange. The new itineraries and projects that would come were built on a physical environment established in the Vakhsh valley region that bore the legacy of real economic life that appears unusual to the historiography of the 1930s.

CONCLUSION

The central problem of this dissertation is the physical manifestation of the state in the newly created territory of Tajikistan. I ask, what was the difference between the Soviet announcement that this republic existed, and actually making it so through changes to the physical environment of its territory? I find that the grand aspirations of the revolutionary regime depended on the arrangement of basic material aspects of economic life. The massive mobilizational projects that characterized especially the Stalin era of the 1930s would have been impossible without functional transportation and commodity chains—fundamental economic factors in any society. Infrastructure and freightage, however, were material phenomena whose establishment and scale of presence reflected the implementation of Soviet ambitions, and thereby the degree of the establishment of the state. The pursuit of economic growth in Tajikistan had led to permeant changes in its physical environment. The Termez-Dushanbe Railroad, the Stalinabad-Qurghonteppa Highway, and the Vakhshstroi Railroad, along with other structures, made parts of the republic's territory platforms more suited to enterprises contributing to the larger economic endeavor of sustaining the project of the Tajik SSR. Growing constellations of roads, combined with increasingly complex human, animal, and machine labor of shipping services were workscapes of the state. This finding recommends underexplored avenues of analysis for a series of problems in Soviet history for which there are currently few explanations.

One of the least understood issues of the literature is that of persistent delays in the completion of projects. A key explanation—just as hard to understand—is that projects were delayed because of the fact that economic life was characterized by ubiquitous shortages of all forms of capital. Enterprises might be held up because of a lack of construction materials, labor, or food for the workers. I have demonstrated that explanations for shortages of capital that were

connected to delays of projects are achievable through of analysis of the way that organizations obtained their capital. Commodity chains were crucial to this endeavor. The various agents and activities that characterized their operations show the manner in which cargo was transported from place to place, and why it might have arrived late or not at all. The pace, scale, timing and fate of Soviet enterprises dependent on freightage may be better understood through an engagement with their ad hoc everyday dynamics.

The infrastructure upon which transportation was conducted also determined the degree to which commodity movement could be achieved. Environmental management of mobility was thus a basic problem of Soviet economic growth endeavors, with the potential to set the pace and character of historical change. Railroads, highways, or dirt roads that were poorly constructed slowed and stopped traffic. On Tajikistan's rugged terrain, the quality of most roads was low and hard to maintain. Their imperfect surfaces damaged the vehicles, animals, and cargos that traveled them, which in turn inhibited flow as well. Roadlessness, moreover, demanded that state officials rapidly explore and seek knowledge of Tajikistan's little understood native environment in order to facilitate the building of entirely new routes between settlements that were intended for rapid economic growth. The history of infrastructure in Tajikistan, and likely throughout the USSR, provides an important window on the interaction between the rhythms of daily workscapes in mobility and utopian aspirations for unprecedented levels of real, material change.

As a foundation of economic and social activity, the transportation sector provides opportunities for fuller understandings of Soviet historical change because it engages contingencies involved in efforts to implement political and cultural ideals. As I demonstrated, the Soviet ideal of the modern mobility as enabled by automotive vehicles was often not feasible for transportation management in Tajikistan. Sometimes, routes were not yet sufficiently

navigable roads, and in other cases machines would have destroyed what had been constructed. The desire to use trucks and tractors in transportation also faced added challenges of commodity chains themselves because obtaining adequate supplies of machines from Moscow was difficult. Instead, the modern face of transportation in Tajikistan was ungulates. As I demonstrated in Chapter 4, horses and camels comprised the means of shipping in the republic, where the regime employed modern management to overcome challenges of importation and technology, particularly through the institutionalization of breeding infrastructure by the mid-1930s. The world of Soviet mobility in 1920s and 1930s Tajikistan, and many other Soviet regions, was characterized by animals.

My analysis of state management of mobility and environment for economic growth in Tajiksitan promotes an understanding of Soviet geographic history at odds with idealized cultural interpretations focused on modernity and nation. From the perspective of economic life, the republic's landscape was characterized by orographic challenges unlike those of any other region in the USSR, where real and potential animal and machine labor defined the speed, direction, and location of economic activity. The workscapes of shipping, as I demonstrated in Chapter 5, mediated the aspirations of planners and the realities of terrain to define rapidly changing geographies of settlement and production. Land transportation and commodity chains were thus consequential in the realization—indeed, the substantiation—of ambitions defined and implied by political geography. As I demonstrated in Chapter 1, the existence of a single railroad, from Termez to Dushanbe, facilitated the very opportunity for Soviet efforts to commence economic growth projects on a desired scale. The outcome of my approach to geography is engaging contingency as a daily experience with potentially great consequences.

This picture of how the physical environment of Tajikistan changed because of transportation and commodity chains also engenders a way to understand how the USSR worked as a post-colonial state. The Soviet empire managed the movement of capital through various aspects of logistics, which facilitated state management of resources that regional administrations needed for economic growth. To this extent, many regions' relationship to sources of capital was a dependent one—extremely so in the case of Tajikistan. The material quality of this reality clarifies the apparent paradox of how Soviet authority based in Moscow could have exerted continuing influence over the republic's southern regions where, as I showed in Chapter 3, economic operations were characterized by activities that not only deviated from central plans and norms, but were frequently illegal in their daily experience. Officials acting on behalf of state agencies throughout the USSR often acted in ways that appeared counterproductive and even contrary to state aims. The unplanned shipping activities that I analyzed in especially Chapters 3 and 5, however, were designed for the survival of individuals and enterprises. They were not, based on the evidence, meant to actually derail or sabotage any particular project or endeavor of the state. Rather, they were strategies that allowed people to survive conditions of profound difficulty as they labored in organizations that ultimately served the state.

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