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Digital Disinformation

Computational Analysis of Culture
and Conspiracy Theories in Russia and
Eastern Europe

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Ad maiorem Dei gloriam inque hominum salutem. This book is dedicated to Lynn Chew, and also to all the friends in Russia and Eastern Europe without whose love and support we would never have gained the depth of understanding that we have of their culture.

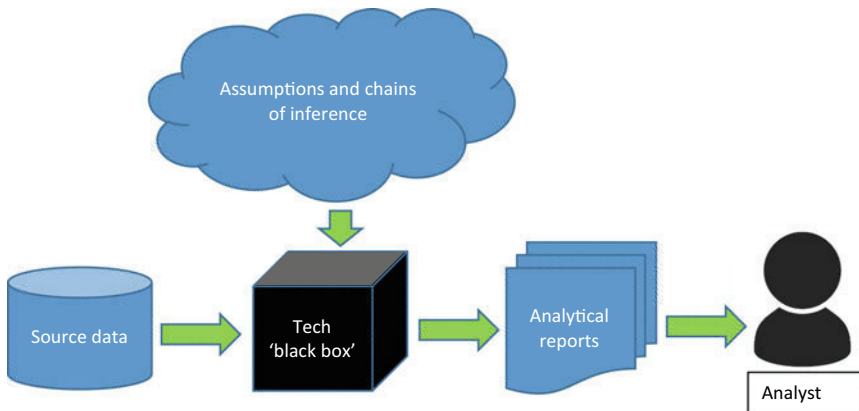
Preface

In 2021, we (Galisteo Consulting Group, Inc.—Peter Chew’s company) were engaged by the Office of Naval Research (ONR) to write a series of six reports dealing with different aspects of the information environment in the former Soviet Union and Warsaw Pact countries. ONR turned to us for two main reasons. One of these was our shared interest in developing analytical tools usable by government analysts seeking to make sense of the information environment. But the US and other Western governments already have many technologists working in this area, and the other reason ONR engaged us to write these reports was that our linguistic, cultural, and historical knowledge and experience of the region goes back 37 years. We, the authors, have all studied Russian, we have lived in the USSR or former USSR, and we have also worked and volunteered there. Our friends in the region have helped us understand what makes the people ‘tick.’

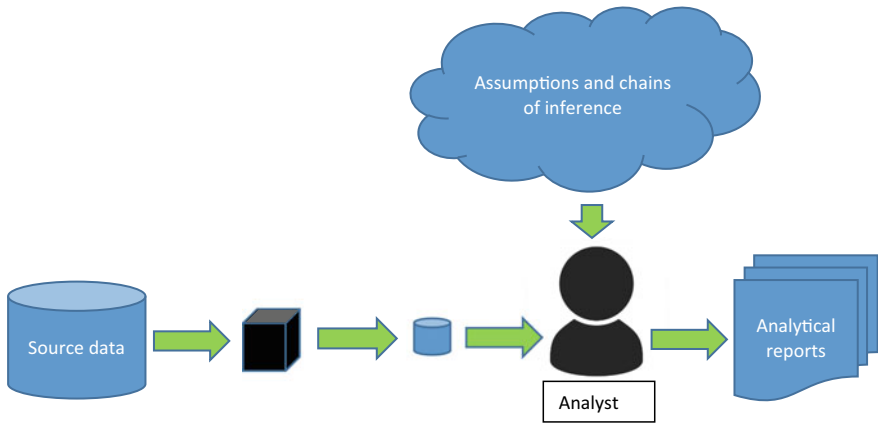
Indeed, we would argue that sense can hardly be made of the information environment without understanding what motivates the people, from those who post content on social media to those ordering the troop movements perhaps caught on satellite imagery. Too often, we have seen how analysts miss the simple import of a post in Russian. This might be because automated translation technology, for all its recent advances, fails to take into account the cultural backdrop. One branch of computational linguistics, sentiment analysis, attempts to remedy this by categorizing the ‘sentiment’ of text, but we think that sentiment analysis also over-promises and under-delivers. While knowing the cultural context of words helps the informed reader quickly understand the significance of those words, it is not as though culture is a one-dimensional phenomenon which can be simplified to a ‘positive-negative’ continuum, or analyzed in terms even of several orthogonal axes of sentiment. Unfortunately, we have seen too many examples where technology and analytics are used to create a dazzlingly impressive ‘Rube Goldberg’ machine, where this obscures the way that the analysis in the end misses some of the key details in the content being analyzed.

Still, technology is undeniably a force multiplier. A pressing question many in the analyst community (e.g., in government), therefore, face is: In the era of social media, how *can* we best leverage technology to make sense reliably of mountains

of open-source data, while adhering closely to the guideposts of each culture? Are there ways, as it were, to replicate the dependable relevance of Google’s algorithms to retrieve relevant results (PageRank), or Amazon’s algorithms to recommend products (collaborative filtering) in another domain—helping those entrusted with our national situational awareness to make sense of the information environment? We believe there is, and it depends simply on the right division of labor between the human and the machine. And one of the contributions of this book, we hope, will be to demonstrate examples of what we believe is the way. We draw in part upon the insights of Richards Heuer, a CIA author, that assumptions and bias can hardly be avoided, but can at least be made transparent so competing hypotheses can best be weighed. With regard to the role of technology, we believe it is necessary to get away from the idea that technology can automate following chains of inference, generating fully fledged reports (intelligence products) for the analyst. The effect of this is simply to bury assumptions inside a ‘black box’ of technology where they may be hard to impossible to question.



Rather, a better use of technology is to reduce and summarize large quantities of data so that the human analyst can see the forest instead of the trees. This is a function at which big-data analytics techniques excel and where their utility is proven. Then, the assumptions, biases, and chains of inference—including knowledge of the cultural backdrop—are left where they belong, with the analyst, and it is then up to the analyst to report on what he or she finds. Technology still acts as a force multiplier for scarce analyst time, because he or she can get through more material, more quickly, and with more confidence that key patterns are not being missed.



It should be noted here that our expertise is in computational linguistics and text analytics, and for this reason, we limit the scope of this book to text (not images, videos, and the many other modes of expression that constitute the information environment). Still, we think the relative places of technology and the analyst would probably be similar when applied to other modes of communication; that will be for others to write about.

We have been asked what the main thesis of this book is. In addition to the thesis stated above (our concrete proposals for ways technology can play a better role in analysis), we use the data to advance a thesis about Russia in particular. And here, our own analyst background cultural knowledge and assumptions come into play. We argue from the data, and our analysis of it, that the vast majority of recent, problematic Russian actions and words (including many of the ‘words’ in social media) fit very long-standing patterns in Russian culture and history. These are patterns that are constant from Tsarist Russia, through Soviet rule, through the disintegration of the Soviet Union in the early 1990s (which we witnessed first-hand), to today. This same argument has been made by Russian historian Richard Pipes and has sometimes been mischaracterized as ‘cultural determinism,’ the idea that Russia because of its cultural flaws cannot escape these patterns. We juxtapose various views, including those of Pipes, Solzhenitsyn, and voices from social media today in Russia, to show that there is a way out for Russia, but that it depends on Russians accurately recognizing the roots of the problematic patterns in order to be able to turn away from them—something harder than it sounds, because even Solzhenitsyn erred in this regard. But there is hope, because some contemporary voices in Russia are speaking out. Whether these voices calling out in the wilderness ultimately prevail, or whether they continue to be suppressed following a centuries-long pattern, will itself say something about the broader Russian capacity for honest self-introspection and repentance. But one thing is certain in our view: the way out for Russia is and will continue to be articulated in Russia, no matter the attitude of the powers that be.

It is incumbent on us in the West to be discerning about the voices we hear, and to do all we can to give those who are ‘speaking truth to power’ the best platform we can. Our own security will also depend on it.

Albuquerque, USA

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Chapter 1

Introduction



Abstract We introduce foundational concepts and theses on which we shall elaborate in ‘Digital Disinformation’: the place of culture in explaining why Russia is what it is today, the challenges faced by analysts in making sense of vast amounts of data in the modern era of open-source data, and our view of how state-of-the-art data analytics techniques can best be leveraged to help analysts make sense of all that data while not losing sight of the cultural fundamentals.

In ‘Digital Disinformation’ we have two principal theses. One of these relates to the world of data analytics and how to do analysis of the information environment. The other has to do with why Russia, as the ‘eight-hundred pound gorilla’ in Eastern Europe, is what it is, and how we in the West can most productively deal with Russia here and now.

The two theses are related in that both should be of interest to those in policy and government circles, in addition, perhaps, to many in academia and journalism. From the nuts and bolts of data collection and analysis, to the more philosophical questions about Russia, we span the gamut of what many, often ‘stovepiped’, groups in government are thinking about with respect to Russia. There are few, if any, thinking about these two things simultaneously, and that hurts our ability to understand and deal with Russia. But this is also an interdisciplinary intersection in which we believe we are uniquely able to share insight, because both the nuts-and-bolts computational analysis, and the timeless philosophical view of Russia, are central to our own education and experience. All the authors of this book have studied Russian language and literature (Peter Chew, for close to 40 years). We have all lived in the Soviet Union, or former Soviet Union, in Russian-speaking countries which are now firmly adversarial to Western interests generally. We have seen and experienced, from the inside, that adversarial worldview, and we ourselves have seen the continuity, which might not be obvious to the casual observer in the West, between the mentality of latter Soviet days to the present. What we have seen is not always easy to put into words, but that is nonetheless a goal of this book.

At the same time, all the authors have an interest (and training in their graduate studies) in what the latest computational techniques can bring to the digital age of social media. We do not claim that the algorithms that we present in this book are new, although some of the applications may be. Our other, more computational, goal is to help show the way towards better using some of the latest data analytic techniques within an integrated policy and analytics framework (one that is not divorced from a proper cultural and social understanding of Russia). By necessity, we can do no more than scratch the surface here. As computational linguists, we focus on methods for *text analysis*—not videos, images, or the many other types of media that also dominate the information environment. (On the other hand, we cast a broad net in terms of the languages: we seek out Twitter data, for example, in Russian, Polish, and Ukrainian, because we think it is important to understand what people in the region are saying in their own words.) But we also limit our focus in another way, to a specific type of text analysis: unsupervised, vector-space, ‘bag-of-words’ analysis—not, for example, phrase-structure grammar parsing, supervised learning, deep learning, or the many other flavors of approach that exist. Our reason for this focus is, admittedly, perhaps our own experience and training (although, in fact, Peter Chew’s doctoral thesis was firmly in the camp of phrase-structure grammar). We stick to our knitting and demonstrate applications of what we know best. But we also make the case in this book that methods of text analysis should be selected, generally, with more care than is often the case. We have reservations about supervised or rule-based learning because of the way they build in, and then often obscure, assumptions that are extraneous to the data, creating a ‘black box’ that lacks explainability—something computer scientists may not care about as much, but which their customers in the world of analysis surely do. We have similar qualms about the lack of explainability for deep learning models. It may be that our reservations stem, again, from our necessarily limited perspective and background. But these are questions that should nevertheless be asked of, and answered for, any data analytics approach, so that customers can have trust in outputs. We are not saying that the analytical approaches we demonstrate in this book are the *only* ones that would fit the bill, nor are we claiming, generally, that our method of analysis is novel. It may be that someone else can indeed demonstrate that approaches to text analysis, other than those we showcase here, can also be used within the same type of framework we advocate, one in which the human analyst maintains a central role, and the role of the technology is to summarize content predictably so it becomes manageable to a human. Our goal is simply to prime the pump, and get others in the world of analytics who have different areas of expertise also thinking more about what the customer really needs—including the subtle, generally unstated, needs for good analysis. We are sure that as other technologists in the analyst community begin to think more about this, other algorithms and applications will be found that do as well as, or better than, what we propose in this book.

Thus, we delve in this book into some of the mathematics that allow unsupervised bag-of-words analysis to be a good fit, we think, for analysis as Richards Heuer conceived of it (Heuer 1999), and we also focus on specifics of the data from 2021 and 2022—an unstable time in Russia and Eastern Europe—to which we apply such techniques. But, as we seek to demonstrate our own vision for computational

analysis in this world, we always try to keep the timeless and philosophical vision close at hand. Thus, we ask the question: is the data¹ in line with our expectations, or is it surprising? Why? Here, we are in effect presenting the nuts and bolts of contemporary Russia and Eastern Europe in the light of what we perceive to be the timeless truths about the region. Again, having spent significant time among the people of the region, and having listened to how they themselves have seriously thought about and explained their moral predicament in their own words, we can pass along what we have heard and we can tell readers of this book what seems most credible to us. There were things about the Soviet Union that baffled us when we first lived there, but we benefited from the moral compass of friends there and thanks to their help, there were many times that the pieces suddenly fell into place, so that what had previously baffled us now made perfect sense. We hope that we can now similarly help curious readers in the same way. Here it should be kept center of attention, though, that one of the enduring problems of the region, from pre-revolutionary Russia through the USSR to modern Russia, is that the ‘master narrative’ that we think best guides one through Russia, is not one that is convenient for the Kremlin, or even, perhaps, most Russians. It is a narrative that is consistently denied, violently suppressed, and marginalized. Yet at the same time, it is a narrative that, if listened to, would be in the best interests of Russia itself, not to mention its neighbors and Western countries. Actually, it is a narrative that is common to all of humanity: we prefer to engage in denial of our own faults rather than facing up to them and turning away from them. When taken to extremes, that may involve shooting the messenger, blaming our own victims, punishing them for our own faults, and generally doubling down on our errors rather than admitting them.

Chapters 2–7 of this book each analyze content from social or news media, each chapter internally structured to start with a cultural overview and then move to relevant social media analysis. But it is only in Chaps. 3–7 that we get into large-scale computational analysis of data. To some extent, also, later chapters build conceptually on the material in earlier chapters: for example, the ‘fringe beliefs’ technique presented in Chap. 6 synthesizes and builds upon the techniques described in Chaps. 3–5; and we then turn around in Chap. 7 and use the same computational approach described in Chap. 6 to make useful characterizations of the Russian media information environment. The chapters should therefore generally be read in order.

The purpose of Chap. 2 is to set the stage a little, introduce the reader to what we think are the big-picture issues that can help an analyst make sense of Russia—a subject that is an enigma to many people. In Chap. 2, we do present some analysis of social media data, but it is small-scale and therefore computation is (by and large) unnecessary. Later in Chaps. 3–7, we show how similar analysis can be scaled up (and it is worth mentioning that the techniques truly are computationally scalable). However, the analyst is kept placed front and center, and as we shall see, making

¹ In this book, we treat ‘data’ as a singular noun, in common with usage in much of the data science literature. In our quotations of third-party material, we adhere to the original author’s usage without further comment.

sense of the data is qualitatively the same from his or her point of view, whether or not we use more computerized approaches.

As we shall see in Chap. 2, Aleksandr Solzhenitsyn, the heroic Soviet dissident—who later on began to sound like Putin—illustrates well the problems of Russia today. The process of identifying national faults is not as easy as it seems: it seems fair to say that Solzhenitsyn believed (erroneously, in our opinion) that if one could in effect turn the clock back in Russia to before Communism, then the nation would be saved. But in reality, the authoritarianism, control over information, and violent suppression of dissent have been a recurring pre- and post-Soviet theme, as well as during the Soviet era. Solzhenitsyn, it turned out, had misidentified Russia's problem. We do not think it is that complicated, though: national pride prevents Russians, on the whole, from admitting how lies and violence have become ingrained in the culture. The explanation lies in timeless values common to all humanity. And there is nothing really preventing Russians, as indeed any nation, from humbly acknowledging the problem and turning a new leaf. Whether that happens is another question; and if it does not, we think the spiraling pattern will continue.

The war in Ukraine is, at the time of writing this, in flux. In Chap. 3, though, we maintain our focus on the more timeless aspect of the conflict, and pose the question of what is really driving it. Both the current data from social media, and what we gleaned from our own conversations with people in Russia over decades, seem to point in the same direction: baser human instincts like Russian envy and pride are key drivers. The violence inflicted by Russian troops on Ukraine parallels what we learn about from writers stationed in the region a century ago, in the early years of Soviet rule. And basic enduring features of the geopolitical and economic landscape, like the supply-and-demand considerations around Russia's natural resources that were evident to Peter Chew when he worked in the oil and gas sector in Russia in the mid-1990s, explain a significant part of the conundrum that Europe finds itself in. Europe is tested by the seemingly competing imperatives of standing up for democratic self-determination by sanctioning Russian oil and gas, while keeping domestic populations politically on board with the prospect of winters of scarce, expensive fuel. The underlying economics that are the catalyst for this conflict will remain unless, for example, new oil and gas reserves are found, or there is a game-changing upset in the patterns of energy consumption.

In Chaps. 4 and 5, we focus on some of Russia's neighboring countries to the west that went in a significantly different direction after the fall of the Soviet Union: the three Baltic states and Poland. We describe what in the culture of these countries makes them different from Russia, but also, where the similarities are; and how and why the differences have manifested themselves since the early 1990s. Around the time we wrote the chapter on Poland, a (manufactured) crisis had erupted on the border of Belarus (Russia's ally and close cultural cohort) and Poland. Belarus's president Lukashenko had summoned Middle Eastern migrants to the border, promising them what was not his to promise—a new life in the European Union. Again, we draw upon the moral compass gained from friends in the region to help readers, we hope, make sense of the tangled mess, separate disinformation from fact, and understand in context what Poles and Belarusians have been saying about the crisis. We

also aim to help readers understand which information maneuvers in the region gain the most traction, and why: something that we believe would help guide Western strategic communication generally.

In Chap. 6, we take a different tack. In today's world of social media and 'digital disinformation', we often hear a distinction made between the 'mainstream' and the 'fringe'. While we think 'mainstream' versus 'fringe' is a useful concept for those seeking to understand the information environment, we believe this distinction may be too often conflated with 'fact' versus 'fiction'. Without assuming a stance of moral relativism, we can say the reality is that 'disinformation' may be 'mainstream' and 'factual information' fringe—or the other way around. It depends. (Indeed, in the cultural environment of the USSR or Russia today, it might well be that the truth is considered fringe; it is not by accident that many Russians and Russian emigres to the West, particularly those from religious minorities who were oppressed in the USSR, are distrustful of mainstream ideology.) But again, we take a nuanced view, and we say discernment is required. Whether a fringe view is a prophetic voice in the wilderness or simply a conspiracy theory is not a question that computational techniques are easily equipped to answer—here, we think the human analyst has his or her proper role. However, what computational techniques *can* do is help the analyst find the needle in the haystack in the first place. The words people use are often telltale markers of their beliefs, whether this is conscious or not, and computational text analysis is well-equipped to find unusual clusters of words and pinpoint for an analyst where to look to find the 'fringe'. In this chapter, we show a novel application of unsupervised outlier analysis, building upon the bag-of-words vector-space model, which in effect acts like a CT scan of large amounts of text, helping the analyst quickly find anomalies, just as a trained radiologist may detect anomalies from medical scans. We demonstrate this approach using text expressing a master narrative applied to Russia that is not commonly encountered, yet has surfaced over the millennia on different continents, and seemed to the author (Peter Chew) unusual when he first encountered it. (Whether this application of the narrative qualifies as conspiracy theory or prophetic we will leave for the reader to decide.)

In Chap. 7, we turn back to what the Russian-language media—both Kremlin-controlled and independent—have been saying over the initial weeks of the Russian invasion of Ukraine. We synthesize all the unsupervised computational approaches of previous chapters to help make sense of the data. No doubt, by the time this book is published, the narratives heard in the Russian-language media may have changed, as indeed may the course of the war in Ukraine. Still, we strongly believe that the points on the moral compass that help us make sense of the data will turn out to be as timeless as ever. In addition to pointing to this, the chapter also aims to show that in the context of the Russian media landscape, an independent Russian-language outlet (Meduza, based in Latvia) looks like a fringe viewpoint, based on the analytical technique outlined in Chap. 6. In this landscape, calling things by their names (a 'war', for example, not a 'special military operation'; enumerating casualties; talking about 'aggression' and 'victims') is fringe, because these expressions are taboo in modern Russia. The current Russian government, like its Soviet and Tsarist predecessors,

seeks to suppress the truth and use all the force of the law to do so... and that, we think, is because it feels threatened by the truth.

So, how do we tie all this together? In Chap. 8, we conclude on an optimistic note. Russia is not trapped in ‘cultural determinism’, destined always to repeat the same pernicious patterns of official lies and violence against those who stand up to them. That this is so is demonstrated by the very existence of courageous voices on the Russian ‘fringe’ continuing to speak up; something even our own data analytics algorithms find. These voices say, just as we do, that the salvation of the nation will depend upon honestly facing up to the mistakes of the past and consciously turning away from them. This, actually, is a message that can apply not just to Russia, but is also a universal moral message applicable to any nation. Germany, for example, was brought to a point where it turned away as a nation from Nazism; America has had to face up to the issue of slavery. It is not predetermined how any individual nation will respond when the time of testing comes—that is a matter of national free will. It may be that Russia will always be characterized by violent, opportunistic, paranoid imperialism. Perhaps the ‘Gog and Magog’ narrative is not so far off. But that is up to Russians. Meanwhile, those of us who are tasked with interacting with Russia will do well to see all the data points in a right moral context. We hope that this book helps show how that can be done, from analysis of the atomic building blocks of language—letters and words—to analysis of the big-picture realities that explain why Russia is what it is.

Reference

Heuer, Richard. 1999. Psychology of intelligence analysis. *Center for the Study of Intelligence*. Accessed July 29, 2021. <https://www.cia.gov/static/9a5f1162fd0932c29bfed1c030edf4ae/Psychology-of-Intelligence-Analysis.pdf>.

Chapter 2

Soviet Union 2.0



Fig. 2.1 Author photo: purchasing food in the USSR, 1990–1991

Abstract The renewed Russian invasion of, and war in, Ukraine in 2022 (following the previous Russian annexation of Crimea and Russian-backed seizure of Donetsk and Luhansk in 2014) has precipitated wide-ranging consequences not just for Ukraine, but for Russia too. Among the most visible of these has been the flight of Western firms from Russia, an abrupt reversal of a process which, starting in 1990 around the time of the breakup of the USSR, then seemed equally rapid in the direction of liberalization and Westernization. All this has prompted a number of Western observers, ourselves included, to wonder if a ‘Soviet Union 2.0’ is on the horizon, and if so, what it might look like. How do the patterns of today correlate with the patterns of history, and what might the life in the original Soviet Union (Fig. 2.1) tell us about what could be ahead? And if there is a Soviet Union 2.0 or something like

it, what does that mean for Western strategic communication amidst Great Power conflict—starting with the very basic question of how we communicate if channels of communication are cut off by a new Iron Curtain? In this chapter we draw from personal experience, literature, culture, history, and what Soviet and Russian figures have said about themselves to attempt to answer these questions. (We do not yet carry out any large-scale computational analysis of content; the purpose of this chapter is to set the stage for following chapters by demonstrating on a small scale the type of approach that we then scale up with computation in Chaps. 3–7.) We hope to provide an analysis which is relevant for Western analysts seeking to understand and maneuver in today’s information environment.

2.1 Background

Just over two months prior to the first draft of this chapter, Russian forces invaded Ukraine at the behest of Russian President Vladimir Putin. Perhaps looking back to August 2021, when Afghanistan fell to the Taliban within a matter of days after US forces pulled out of Afghanistan, Putin and many Western observers expected Ukraine to fall to Russian forces, also within days. However, one of the most frequently commented-on aspects of this war is the fierce resistance of Ukrainian defenders and the underwhelming performance of Russian attackers. It has been suggested (Corera 2022) that Russian mistakes are, in effect, the result of military planning ‘by a KGB officer’ (Putin) rather than by competent military commanders. It has also been suggested that Putin is a victim of his own propaganda and the group-think engendered by his tendency to silence opposing viewpoints and only to listen to a narrow group of advisers, one further narrowed by the COVID-19 pandemic.

A highly visible ramification of the Russia-Ukraine war, besides the obvious physical devastation in Ukraine, has been its effect on Russia. Sanctions often described as ‘unprecedented’ (e.g. Mercatus Center, George Mason University 2022) have been imposed on Russia by Western countries. Partly because of this, and partly because of organic decision-making by company executives who see reputational and values-based risk to continuing business in Russia (see e.g. McDonalds 2022), many Western firms have abruptly deserted Russia over the course of the last month. The author (Peter Chew) was living in Russia—then the Soviet Union—over a period of 10 months from 1990 to 1991; it was on January 31, 1990 that the first McDonalds restaurant appeared in Moscow (Fig. 2.2). In retrospect, even now, it is easy for a Western observer to underestimate how significant the impact of this was in the Soviet Union of the time. The effect was as much psychological as anything else. What McDonalds was among the first to do, in effect, was to puncture the drab uniformity of Soviet life, where Western goods and services were unavailable. For the author, a student in Kazan, a provincial town 500 miles east of Moscow (where even by mid-1991 nothing remotely as Western as McDonalds had reached), the arrival of McDonalds signaled that a kind of Western normality was now available in the Soviet Union, and available in theory to anyone. As normality settled in and



Fig. 2.2 The first McDonalds in Russia (in Pushkin Square, Moscow), which opened in 1990. Photo by Artem Svetlov, retrieved from https://commons.wikimedia.org/wiki/File:McDonalds_Moscow_Pushkinskaya_2013_%2814795521387%29.jpg, reproduced under Creative Commons License CC-BY-2.0

appeared in more forms over the following years, the new normality became something just to be expected. McDonalds and other Western brands were no longer a novelty in Russia, just part of regular life, as they have been in the West for a long time.

Now, McDonalds' announcement on March 8 (*ibid.*) that it has closed its restaurants in all 850 of its Russian locations seems just as much a bellwether to those of us who remember 1990.

We are far from being the only ones to draw comparisons between 1990 and today in Russia. Little (2022) also references the time around 1990 (the fall of the Berlin Wall) and hypothesizes that 2022 will go down as a pivotal year, like 1789 (the French Revolution), 1815 (the post-Napoleon Congress of Vienna), 1919 (the Treaty of Versailles), 1945 (the Yalta partitioning of Europe into Western and Soviet spheres of influence), and 1989 (the fall of the Berlin Wall). So, in 2022, are we, as Little suggests, experiencing the 'rare thing' of 'liv[ing] through a moment of huge historical consequence' and—a separate question—can we 'understand in real time' its significance? Putin (a former KGB counterintelligence officer who worked in East Germany, that part of Europe which, under Yalta, was under the Soviet sphere of influence) is on record that he considers the breakup of the USSR the 'greatest geopolitical catastrophe of the [twentieth] century' ('крупнейшая геополитическая катастрофа века') (Regnum.ru 2005). Putin might like to have his cake and eat it, hankering for the USSR and keeping what Western firms have to offer (Carman 2022), but with the departure of Western firms from Russia, Putin's Russia certainly

gives the appearance of moving towards Soviet Union 2.0, a place where Western normality again has no place.

In one of those pivotal years listed by Little (2022), 1919, the Soviet experiment had just begun. The October Revolution, officially known in the USSR as the Great October Socialist Revolution, happened two years before. Vladimir Lenin's Bolshevik Party had in 1917 overthrown the government of Tsar Nicholas II through a violent insurrection in St. Petersburg (then Petrograd). Since Bolshevik rule was not universally accepted in Russia, this insurrection precipitated a Russian civil war which lasted from 1917 until 1923. Civil war engulfed wide swathes of the Russian empire from its Far East across Central Asia to Crimea, present-day Ukraine, Poland, and countries in the Baltic region as far west as Finland. By 1923, forces opposing Lenin's Bolshevik Red Army—the White Army and others—had been subdued, and Soviet rule consolidated, in most of the above-mentioned places. However, in 1919, it was still by no means sure that the outcome of the civil war would be a Soviet government capable of lasting for about 70 years.

Isaak Babel, a Russian-Jewish journalist and author born in Odessa, Ukraine, was an on-the-ground participant and witness to one part of that massive civil war. In 1920, Babel was assigned to the First Cavalry Army (the Konarmia) (Первая конная армия, or Конармия) of Red Army commander Semyon Budyonny, and stationed in present-day Western Ukraine. In 1920, this army, consisting of local Cossacks allied with the Bolsheviks, fought against Polish forces and drove the Poles out of Ukraine, but was later defeated at the Battle of Komarów, close to where many Ukrainian refugees are entering Poland today. Around the time of this defeat, the Konarmia suffered from low morale and discipline. Robbery, violence, and murderous anti-Semitism perpetrated against the civilian population by the Konarmia's fighters were commonplace (Barmine 1945). Babel, who had an intellectual background, writes first-hand about much of this anti-Semitism and wanton violence in his book *Red Cavalry* (Конармия) (Бабель 1927). Babel's book, in fact, provided the Soviet public with one of its first literary exposures to the bitter reality of the war. Babel's descriptions based on participation as an eyewitness (and, in some cases, perpetrator) sound similar to some of the accounts (confirmed or otherwise) from victims of the Russia-Ukraine war today (e.g. Bowen 2022; Sheridan 2022), so reading Babel is particularly poignant today as Russian political leadership works to close the public's eyes to the reality of the 2022 war in Ukraine. In one story in *Red Cavalry*, 'My First Goose', Babel recounts how he brutally kills a goose belonging to an old woman with whom he is quartered and orders her to cook it. He does this for no other reason than to prove himself worthy of the camaraderie of his brutish Cossack fellow soldiers, a worthiness which they doubt because of his glasses. (As an aside, we are told that the Cossacks gratuitously toss his box of belongings over the fence, destroying it in the process.) The story ends with him falling asleep—the goose not eaten, but killed for the sake of killing—and Babel saying of himself: 'I dreamed and saw women in my dreams, and only my heart, stained with murder, screeched and bled.' ('Я видел сны и женщин во сне, и только сердце мое, обогренное убийством, скрипело и текло.')



Fig. 2.3 Reporting from Kharkiv frontline from Quentin Sommerville¹

In *Red Cavalry*, Babel provides an insider's insight into the Soviet approach to war a century ago, shedding light on internal pressures that resulted in the cruelty of that culture's way of waging war. These insights still seem relevant today: as BBC reporter Quentin Sommerville noted about the Russian bombardment of Kharkiv in 2022, and referring to Russia's recent history in Chechnya and Syria: 'If you don't recognise these tactics [by Russia], then you haven't been paying attention' (Fig. 2.3). If the peer pressure and expectations from Babel's Cossack comrades could induce Babel, a quiet Jewish intellectual, to overcome his apparent distaste and commit acts of barbarity in the midst of an ideologically-driven war, then it is not hard to imagine how similar peer pressure would still be a factor in the culture today, leading to similar results. At the same time, if Babel's conscience was pricked in a way he could admit to his readers, even if in the moment he hid behind bravado, perhaps there is some opening for communication with those who appear to be irredeemably caught in the maelstrom of propaganda and violence.

When we think about 'Soviet Union 2.0', Isaak Babel is an interesting historical data point to consider for a variety of reasons. Both Babel's time and 2022 may bear witness to the shifting of geopolitical tectonic plates, with the war which the

¹ <https://twitter.com/sommervilletv/status/1502000265490227206>, retrieved March 21, 2022.

Red Army fought then auguring Soviet rule to come. Nonetheless, it might have been difficult in 1920, at the time of the civil war and the onset of Soviet rule, to foresee how Babel's writings would open the Soviet public's eyes a few years later to Bolshevik excesses, or that by 1939 Babel, after working for the Bolsheviks as a war correspondent and propagandist, would be arrested by the Soviet secret police on fabricated charges of terrorism and espionage, and executed in 1940. In the Soviet Union, it was often the case that no 'good' deed (from the authorities' point of view) went unpunished. This turn of events illustrates the inherent ambiguity, arbitrariness, and instability of Soviet ideology: those favored by the regime today could be tomorrow's enemies of the state.

Besides Babel, another interesting literary figure to consider with respect to Soviet rule is Aleksandr Solzhenitsyn, perhaps the most famous Soviet dissident, thanks to whom the horrors of the Gulag (a Russian acronym for Main Camp Administration, or Главное управление лагерей) became widely known in the West (Солженицын, Архипелаг Гулаг 1973). Solzhenitsyn grew up in a devout Russian Orthodox family that had defied Soviet atheist campaigns. However, while young, Solzhenitsyn turned to atheism and belief in Marxism-Leninism. During World War II, Solzhenitsyn, like Babel before him, served in the Red Army but was arrested and sent to the Gulag for criticizing Joseph Stalin in a private letter. It was during his time in the Gulag that Solzhenitsyn returned to Orthodox Christianity. Under the Khrushchev regime, the authorities tolerated his writing novels, including about repression under the Stalin regime that preceded Khrushchev's. However, perhaps because the Gulags continued after Stalin, Solzhenitsyn's publication abroad of the *Gulag Archipelago* in 1973 outraged the Soviet authorities. Solzhenitsyn was exiled first to Germany, then, in 1976, to the United States. After the breakup of the Soviet Union, Solzhenitsyn returned to live in Russia from 1994 to his death in 2008—a fourteen-year period divided approximately in half between the chaotic pre-Putin era of the 1990s, and Putin's consolidation of power during the 2000s.

Like Babel, Solzhenitsyn illustrates the ambiguities of Russian culture, and its treacherous shifting sands. While he was held up as a hero in Soviet times for his dissident's stand against Soviet ideology and repression, many of the views Solzhenitsyn expressed over the years align closely with what Putin says today. Solzhenitsyn, for example, has:

- Expressed radical views against Ukrainian independence from Russia (Солженицын 1990);
- Implied or argued that the inclusion of Crimea and Donbass in Ukraine was an artificial construct of the Soviet Union which should be reversed (Remnick 1994);
- Argued that twenty-five million Russians in Russia's 'near abroad' are suffering discrimination (Remnick 1994);
- Argued that Eastern Europeans who have suffered through Communism exhibit a certain moral superiority over those living under decadent Western liberalism (Solzhenitsyn 2002):

A fact which cannot be disputed is the weakening of human beings in the West while in the East they are becoming firmer and stronger -- 60 years for our people and 30 years for the

people of Eastern Europe. During that time we have been through a spiritual training far in advance of Western experience. Life's complexity and mortal weight have produced stronger, deeper, and more interesting characters than those generally [produced] by standardized Western well-being.

- Criticized Soviet (and its atheist and Marxist-Leninist) ethnic, cultural and religious oppression of Russia (Solzhenitsyn 2002)²:

One does see the same stones in the foundations of a despiritualized humanism and of any type of socialism: endless materialism; freedom from religion and religious responsibility, which under communist regimes reach the stage of anti-religious dictatorships; concentration on social structures with a seemingly scientific approach. This is typical of the Enlightenment in the 18th Century and of Marxism.

- Argued in 1990 for a new post-Soviet, Slavic union of Russia, Ukraine, Belarus, and parts of Kazakhstan (Солженицын 1990):

Also, our people was divided into three branches purely as a result of the terrible misfortune of the Mongol invasion and Polish colonization. It's just a recently dreamed-up falsehood that as early as the 19th century a separate Ukrainian people existed with a separate non-Russian language. We all came from precious Kiev, 'from which the Russian land came to be', according to the chronicles of Nestor, and from which the light of Christianity dawned on us... In Lithuania and Poland, White Russians [Belorussians] and Little Russians [Ukrainians] considered themselves Russians and struggled against Polonization and Catholicization. The return of these lands into Russia would have been considered by everyone then as Reunification.

Да народ наш и разделялся на три ветви лишь по грозной беде монгольского нашествия да польской колонизации. Это всё — придуманная невдавне фальшь, что чуть не с IX века существовал особый украинский народ с особым не-русским языком. Мы все вместе истекли из драгоценного Киева, «откуда русская земля стала есть», по летописи Нестора, откуда и засветило нам христианство... В Литве и Польше белорусы и малороссы сознавали себя русскими и боролись против ополяченья и окатоличенья. Возврат этих земель в Россию был всеми тогда осознаваем как Воссоединение.

- Criticized the Gorbachev and Yeltsin governments for making too many concessions to the West and bringing Russia to ruin, and praised Putin for starting to undo this damage (Solzhenitsyn 2007):

...the many capitulations and reckless concessions [of Gorbachev] in foreign policy, which brought him such vociferous praise in the West. Under Yeltsin, that trajectory was essentially continued, but exacerbated further by the rampant theft of Russia's property, her national

² Putin, in particular, has blamed Lenin and more generally Soviet rule for Donbass and Crimea being made a part of Ukraine—(Путин, Обращение Президента России Владимира Путина к нации 2022). Even for Putin, as for Solzhenitsyn, Soviet rule is a convenient scapegoat. Putin is right that the Soviet ideal of the 'brotherhood of nations', which we shall return to in Chap. 6, downplayed national differences within the USSR and may thus have sowed the seeds of conflict today. But the question is whether Putin and Solzhenitsyn, in failing to address the root moral causes, embrace tactics that are little different from the underlying secular failings of Soviet Russia (and before). It matters if one misidentifies the sin to be turned from.

treasure, and also by the affirmation of, and lack of any restraint to, State chaos. Under Putin, measures were taken over time to reverse this and save our failed state.

...многочисленные капитуляции и безоглядные уступки [Горбачева] во внешней политике, принесшие ему столь шумные похвалы на Западе. При Ельцине по сути та же линия была продолжена, но ещё отягощена безмерным имущественным ограблением России, её национального достоинства, а также беспрепятством и потакательством государственному хаосу. При Путине, не сразу, стали предприниматься обратные усилия спасения проваленной государственности.

- Opposed NATO's eastward expansion and accused NATO of trying to control Russia (Солженицын 2006):

The United States deploys its occupying troops in one country after another. That's been the situation for nine years now, in effect, in Bosnia; in Kosovo and Afghanistan for 5 years; in Iraq, for three years, although that will not continue for long. The actions of NATO and the separate actions of the USA differ little in practice. NATO has seen clearly that Russia today does not pose it any threat, but is methodically and persistently extending its military apparatus – into Eastern Europe and in a way which surrounds Russia to the south on the continent. At the same time, it is openly supporting 'color revolutions', both in material and ideological ways, and (paradoxically) introducing North Atlantic interests into Central Asia. All this leaves no doubt that it is preparing completely to surround Russia and then deprive her of her sovereignty. No, if Russia were to join such a North Atlantic alliance – one which spreads propaganda and spreads its ideology of contemporary Western democracy by force to various parts of the planet – this would lead not to the expansion, but to the decline of Christian civilization.

Соединённые Штаты размещают свои оккупационные войска в одной стране следом за другой. Таково фактическое положение в Боснии уже 9 лет, в Косово и в Афганистане — по 5 лет, в Ираке пока 3, но там затянется надолго. Действия НАТО и отдельные действия США различаются малосущественно. Отчётливо видя, что нынешняя Россия не представляет им никакой угрозы, НАТО методически и настойчиво развивает свой военный аппарат — на Восток Европы и в континентальный охват России с Юга. Тут и открытая материальная и идеологическая поддержка «цветных» революций, парадоксальное внедрение Северо-атлантических интересов — в Центральную Азию. Всё это не оставляет сомнений, что готовится полное окружение России, а затем потеря ею суверенитета. Нет, присоединение России к такому евроатлантическому альянсу, который ведёт пропаганду и насильственное внедрение в разные части планеты идеологии и форм сегодняшней западной демократии — привело бы не к расширению, а к упадку христианской цивилизации.

Solzhenitsyn was clearly a dissident in 'Soviet Union 1.0'—and suffered for it. But we believe, as Putin's ambitions have become clearer to many at the current 'threshold moment' in history, that Solzhenitsyn has arguably turned out to be one of Putin's ideological foot-soldiers; an advocate, paradoxically, for a 'Soviet Union 2.0'.

But if 'Soviet Union 2.0' is around the corner, what might it look like? What in particular will be the implications for strategic communication, and for Westerners seeking to understand the information environment and its maneuvers and counter-maneuvers? What will be the effects on Great Power competition?

In the next section, we consider these intriguing questions and suggest how to piece together what Solzhenitsyn said with other sources to arrive at a satisfactory way of