

volume 22, autumn–winter 2005

DIVINATIO

studies culturologica series

GEORGE GALE
OSWALD SCHWEMMER
DIETER MERSCH
HELGE JORDHEIM
JAN RADLER
JEAN-MARC TÉTAZ
DIMITRI GINEV
ROLAND BENEDIKTER

Maison des Sciences de l'Homme et de la Société

AMSIHS
Sofia

George Gale

**LEIBNIZ, PETER THE GREAT,
AND THE MODERNIZATION OF RUSSIA
or Adventures of a Philosopher-King in the East**

1. Introduction

Leibniz was the modern world's first Universal Citizen. Despite being based in a backwater northern German principality, Leibniz' scholarly and diplomatic missions took him – sometimes for extended stays – everywhere important: to Paris and London, to Berlin, to Vienna and Rome. And this in a time when travel was anything but easy. Leibniz' intellectual scope was equally wide: his philosophic focus extended all the way from Locke's England to Confucius' China, even while his geopolitical interests encompassed all the vast territory from Cairo to Moscow. In short, Leibniz' activities, interests and attention were not in the least bounded by the narrow compass of his home base.

Our interests, however, must be bounded: to this end, our concern in what follows will limit itself to Leibniz' relations with the East, the lands beyond the Elbe, the Slavic lands. Not only are these relations topics of intrinsic interest, they have not received anywhere near the attention they deserve. Our focus will be the activities of Leibniz himself, the works of the living philosopher, diplomat, and statesman, as he carried them out in his own time. Although Leibniz' heritage continues unto today in the form of a philosophical tradition, examination of this aspect of Leibnizian influence must await another day.

2. Starters: the Polish Misadventure

Leibniz' career began in the service of the Elector of Mainz, Johann Philipp von Schönborn, shortly after he completed his studies at the

8 University of Altdorf. (Aiton 1985, p. 23) Stories differ about how this first career opportunity came to be, but in all cases they pivot upon Boineburg's being the central character. At this time the brilliant statesman Baron Johann Christian von Boineburg had just returned to the Elector's good graces after a four-year hiatus following an imbroglio with French diplomats. Somehow in one way or another (the tale varies), whether it be in Nuremberg or at an alchemical meeting or in Altdorf, Boineburg and Leibniz met. Much impressed with the young scholar, Boineburg persuaded Leibniz to join him, ultimately in Mainz, in service to the Elector.

One of Leibniz' very first tasks involved supporting Boineburg's mission to Poland. There, King Johann Casimir had abdicated, requiring election of a new king. The Elector's colleague, Palsgrave Phillip Wilhelm von Neuburg, wanted the job as king, and, with the Elector's support, asked Boineburg to undertake a mission to Poland in his behalf. Boineburg accepted, and immediately entrusted a major element of the mission to Leibniz. The result was the remarkable document *Specimen demonstrationum politicarum pro rege Polonorum eligendo*. (Leibniz 1923, A IV 1 pp. 3 – 93)

In the preface of *Specimen*, Leibniz makes the first public announcement of a project which he will never lose sight of: applying the new mathematically-based methods of the moderns to problems in all spheres of human activity, from philosophy to law, from psychology to diplomacy.

Hier der Versuch unternommen wird, die mathematisch-syllogistische Methode, die man bisher in der Mathematik und der Philosophie verwendet hatte, auf die Behandlung politischer Fragen zu übertragen und durch politische Sätze, die mit mathematischer Klarheit entwickelt werden, die Meinung der Leser zu bestimmen. (Benz 1947, p. 4-5)

In particular, Leibniz announces in *Specimen*, is the mathematical method applicable to demonstration; his task as it ensues, then, is the demonstration, *more mathematico*, of the legitimacy of Palsgrave von Neuburg's claim on the vacant Polish throne. In the end, he concludes, all the calculated probabilities, especially those based on Poland's political and theological situation between Russia, Germany and, in the south, the Turks, indicated that Palsgrave von Neuburg should be the next king. (Benz 1947 p. 6) Unfortunately, Leibniz' mathematical reasoning didn't conform to the actual outcome of the election: von Neuburg lost.

Yet the outcome of the election is not what is significant for us. Rather, the significance lies in Leibniz' highly original method of reasoning and

expression.¹ It is clear that Leibniz' dedication to this form of thinking dated from his exposure to Jena's Professor of Mathematics, Erhard Weigel. (Aiton 1985, p. 15) During the Summer semester of 1663, Leibniz had studied with Weigel, from him picking up a lifelong commitment to «no less than a reform of the whole of philosophy and science through a reconciliation of Aristotle and the moderns...based upon the mathematical method.» (Aiton 1985, p. 15) Thus *Specimen* provides a fascinating prevision of two central Leibnizian life-long themes: a concern with the East, and a dedication to reform in all of intellectual life.

The episode has some rather curious aspects. For one thing, the document itself bears neither Boineburg's nor Leibniz' name. Instead, it is signed by one Georgius Ulicovius Lithuanus, a previously unknown Polish nobleman; secondly it purports to have been published in Vilna, Lithuania. In actual fact it was Leibniz «der die Schrift 1669 in Danzig drucken ließ.» (Benz 1947, p. 4)² Finally, its publication date is given as «1659». Some have seen this as a deliberate attempt at misdirection; but, as Aiton points out, this could hardly be the case, since events subsequent to the reported publication date are discussed in the ms. (Aiton 1985, p. 26)

In any case, through some mismanagement, copies of the document did not arrive in Poland in time to influence the election process or its outcome.

As we shall see, Leibniz' later dealings with the East are both more transparent, and more successful.

3. Leibniz and the East: Introductory Points

From this first episode onward, Leibniz became drawn into more and more connections with the East. His activities approached the East from two different perspectives, one primarily instrumental, the other more for its own sake. First we consider his instrumental perspective.

Leibniz' instrumental approach took the East in much the same way that it took every other domain open to him, namely as an opportunity not just to learn more, but also to develop his own interests and theories. Yet the East isn't simply 'just one more' applicable domain; rather, there are specific ways in which he took the East to be a richer, more opportune, specimen than all the others. For example, just as he found himself engaged in practical activities in technology at home – in the designs for improvements in the Harz mining operations for example – so also, but more so, did he find himself interested later in the design of river navigation schemes

- 10 integrating the Russian Empire. After all, the scope of the river project in Russia was a far grander opportunity than anything offered him in the Harz or anywhere else in Europe.

Along these same lines is his abiding instrumental interest in getting from the Russian scientists data about magnetic declinations across the empire, this in aid of improving navigation, at that time sorely beset by declination error increases as ships got further and further northward. What we see here is Leibniz' general interest in improving navigation focussed specifically upon a problem uniquely based in the geography of the Slavic lands in the North.

Yet another abiding instrumental interest is exhibited by Leibniz' unceasing pestering of Peter and his diplomats for data about languages spoken in the Empire. Although Leibniz pestered everyone everywhere for such data, he was particularly insistent about the Eastern languages. As it turns out, Leibniz believed that the Eastern languages would be particularly useful in working out his theory of language.³ Although Leibniz' linguistics program is typically global in scope, his interest in the East is quite specific: he has strong hopes that the Russian languages will bridge certain gaps between his (and others') hypothesized 'ur-language', Scythian, and then currently well-known languages. (Eco 1996, p. 3) Nicely enough, Leibniz sought-for linguistic data would be used in a comparative methodology⁴ which he and several contemporaries were pioneering, a methodology which became central to the later project of historical linguistics. (Campbell (in press), p. 12)

In addition to these more instrumental aspects of Leibniz' interest in the East, he has as well some interests which are specifically and directly intrinsic to his connections there, for the most part with Czar Peter the Great. Leibniz had a vision of a Russia which, in his mind, offered possibilities unlike any seen anywhere in the West since time immemorial.⁵ One could say, without much hyperbole, that in Leibniz' thought, Russia was in need of a Philosopher King, and who better was there for the job than he himself? Constructing the Philosopher's Kingdom in Russia became Leibniz' goal. In his project, Leibniz saw the perfection of his own being as a citizen of the world:

Ich werde es mir vor die gröste Ehre, Vergnügung und Verdienst schätzen E.Gr.CZ.M. in einem so löblichen und gottdefälligen Werke dienen zu können; denn ich nicht von den bin so auff ihr Vaterland, oder sonst auff eine gewisse Nation, erpicht seyn; sondern ich gehe auf den Nutzen des gantzen

menschlichen Geschlechts; denn ich halte den Himmel für das Vaterland und alle wohlgesinnte Menschen für dessen Mitbürger und ist mir lieber bey den Russen viel Guthes auszurichten, als bey den Teutschen oder andern Europäern wenig, wenn ich gleich bey diesen in noch so grosser Ehre, Reichthum und Ruhe sitze, aber dabey andern nicht viel nutzen sollte, denn meine Neigung und Lust geht aufs gemeine Beste. (Guerrier 1873, p. 208)

There is probably no better statement of the Enlightenment ideal.

4. Russia: The Leibnizian Project

Leibniz' hopes for Russia based themselves on several key notions, some of which involved the land itself, while others were based in the office and character of Peter.⁶

Foremost among Russia's appealing features was its offer of virgin territory for Leibnizian development. Leibniz puts it this way in one place:

Weil es in Russland mit den Studien gleichsam noch Tabula Rasa, es köndten alda die besten anstalten von der Welt gemacht werden, zu unterweisung der jugend in Sprachen und Wissenschaften. (Guerrier 1873, p. 180)

Because Leibniz sees Russia as a «tabula rasa», a blank slate, as far as education and modern thought is concerned, he imagines that it would be possible to build, from the ground up, a new system of institutions, completely unencumbered by older institutions. This is explicitly remarked in another place:

...und weiss man, dass ein Palast, der ganz von Neuem aufgeföhret wird besser heraus kommt, als wenn daran viele secula über gebauet, gebessert, auch viel geändert worden. (Guerrier 1873, p. 207)

Leibniz here refers to a universally recognized fact: original construction is always easier than remodelling. Old structures are never plumb, they frequently have rot or other infestations, and you can never get parts. But if, as appears to be the case with Russia, there isn't any older structure, well then, the original construction should be straightforward and easy.⁷

It is clear from Leibniz' words here what his vision for Russia is: he foresees the construction of a complete modern society, including educa-

12 tion, training, scientific infrastructure and – although it isn't quite clear here, but will be later – a political and administrative system to govern the whole society.

But Russia's clean slate is not, in and of itself, sufficient for the construction of a modern society. What is needed as well is a leader who can turn Leibniz' dreams into reality. Such a man, or so Leibniz thought, was Peter. Guerrier's assessment of the situation is trenchant:

Denn den Geist eines einzigen Menschen wie des Zaren oder des Kaisers von China zu gewinnin und ihn auf das wahrhaft Gute zu lenken, indem man ihn zum Eifer für den Ruhm Gottes und für die Vervollkommnung der Menschen anregt – das heißt mehr tun als hundert Schlachten zu gewinnen; denn vom Willen solcher Männer hängen mehrere Millionen andere ab. (Guerrier 1873, p. 22)

According to Leibniz' view, to work on Peter's will is to work on all the wills of his subjects: as Peter goes, so goes Russia. He believed this, as Benz notes, «weil Peter so tat und seine Umgebung den Eindruck bestätigte, als könne der Zar mit dem Volk machen, was er wolle, und das Volk mache seine Reformen begeistert mit.» (Benz 1947, p. 87) In the end, of course, Peter «so tat» Leibniz wrong in many important areas. What is surprizing, given Leibniz' seriously wrong view of the actual situation in Russia, is how successful he ultimately was in implementing his plans.

5. Leibniz and Peter

Leibniz and Peter met three times, almost met one other time, and corresponded and worked through intermediaries many times. The most important of these events were these:

1697. Copenbrugge: Leibniz' approach to incognito Peter fails

1708. Vienna. Leibniz and von Urbich plot royal marriage

1711. Torgau. Marriage and meeting occurs.

1712. Karlsberg. Leibniz presents Peter with his first plan.

1716. Bad-Pyrmont. Leibniz presents final plan.

Each of these events requires suitable discussion, beginning with the first.

Peter, fresh from his astonishing victory over the Turks at Azov, resolved to consolidate his power and, singlehandedly, bring Russia from its medieval state into the modern world. But to do this would require some-

thing that had never been done before: opening Russia to the world, and, even more importantly, extending Russia herself into the world. In late 1696, «Peter declared that he was sending more than fifty Russians, most of them young and sons of the noblest families, to Western Europe to study seamanship, navigation, and shipbuilding.» (Massie, p. 149) The youth were not to be allowed back into Russia without «a certificate signed by a foreign master attesting to the student's proficiency.» (Massie, p. 150).

But this was not enough. Peter well knew that the gap between Russia and Western Europe was not merely one of ships and military technology; rather, it ranged across the whole of culture. In Europe, Peter well knew, «new worlds were being explored not only across the oceans but also in science, music, art and literature.» (Massie, p. 163) And he intended to bring these new worlds back to Russia. But to do so required extreme action: he himself would travel to the West, to visit personally the great centers of learning and discovery. It would be the first-ever *peaceful* foreign trip by a czar. (Massie, p. 155) Thus began the Great Embassy.

There was one added wrinkle: Peter would travel incognito – at least purportedly – among the 250-person train; this because he wanted to learn and study new things himself, which he could not were he in his official role as Czar of a great nation. Unfortunately, at six foot seven, hiding his identity turned out to be a difficult task.

Indeed, after only a few weeks on the road, word of the Czar's presence in the Great Embassy had swept far and wide ahead of the travelling band. Peter did what he could to hide in the company, thereby successfully passing through Berlin without much fanfare. Hannover, however, was a different story. There, Sophia, widow of the Elector, and her daughter Sophia Charlotte, electress of Brandenburg – by then a particular friend of Leibniz – determined that they simply must have dinner with this strange man from Moscow, if for no other reason than to see just what kind of a curious being he was. At first Peter was equally determined to avoid the two women, knowing full well the examination he would be subjected to. (Troyat 1987, p. 95) Moreover, since these two noble Western women, well-known for their intelligence and independence, would be the first of the breed the young Czar had ever met, he was especially fearful about accepting their invitation.

In the end, however, it all worked out splendidly. After a four-hour dinner in Coppenbrugge, near Hannover, the dancing began, and partying continued until after four in the morning. Both women were quite fetched with the young man. Sophia, the mother, wrote a friend that «he is a com-

this was no small project. Among the «branches» of the family tree Leibniz was constructing were some containing the Russian nobility. Leibniz had hopes that the Czar would welcome what had been already completed, and help further the task himself.

Leibniz' second request involved his project, already mentioned, to reconstruct the history of the human languages. He was especially interested in obtaining samples of languages from Peter's empire but «qui sont entièrement différentes de la Russe par exemple de celle des Czircasses, Czeremisses, Kalmucs, Sibériens, etc.» (Guerrier 1873, p. 10) Eventually, these samples were provided, first by the younger Le Fort, and later by other representatives of the Czar.

These two requests for the Czar are explicitly discussed by Leibniz in several letters written at the time. Certainly the information desired fits with his ongoing projects; in this sense, the requests are not in the least surprising in their content. But this cannot be said about the contents of a memo that Leibniz prepared – for whom is unclear – at the same time. This memo lays out in quite detailed fashion his grand design for Peter's Russia.⁸ Here are laid the groundworks for all the subsequent recommendations Leibniz will make to Peter in regard to transforming medieval Russia into a modern state. The memo is quite remarkable in its scope and depth.

Noting that the present moment – «c'est une fatalité singulière, ou plustost un coup de la Providence» – provides an unique opportunity «d'humilier les Ottomanes et de faire chasser le Mahometisme au moins de l'Europe», Leibniz argues that there is «en effet rien ne soit plus important pour tous ces points que les sciences et les arts» and «les transplanter dans la Russia.» (Guerrier 1873, p. 15) Two important points are made here. First, Leibniz here reveals part of his grand geopolitical design, the ultimate goal of which is driving the Muslims from Europe, and, if possible, humiliating them in the process. Russia, an awakening power, will play a significant strategic role by directly engaging the infidels all along its southwestern flank. But in order for Russia to succeed in this heroic task, its awakening must be of exactly the right sort, a sort guaranteed only by achieving the transplantation of European arts and sciences into Russia's medieval culture. As Leibniz sees it, the transplanting requires action on seven fronts:

1. Former un établissement général pour les sciences et arts.
2. Attirer des étrangers capables.
3. Faire venir des choses étrangers qui le méritent.
4. Faire voyager des sujets avec les précautions convenables.

5. Instruire les peuples chez eux.
6. Dresser des relations exactes du pays pour connoistre ses besoins.
7. Suppléer à ce qui manque. (Guerrier 1873, p. 16)

Each of these moves is discussed in greater detail by Leibniz in the paragraphs following this list. It is worthwhile looking at these discussions, since they will figure, sometimes unchanged, in his dealings with Peter over the next 19 years. Let's begin at the top.

Formation of a wide-ranging agency for science and art Leibniz takes – here and always – to be the most essential first step in fostering modern development. This applies not just in Russia, but also in the developing countries of Europe: he argues time and again that the establishment of a central agency in charge of science and the arts is essential to development. Two elements are key: personnel and funds. The men chosen for leadership «devroient être fort versées dans les sciences et arts, d'un genie élevé, au dessus de l'interest cherchant plustôt la gloire que le gain.» (Guerrier 1873, p. 16) This latter is a nice touch; obviously, it's safer to trust those looking to gain glory from their successes rather than those looking to gain riches! As far as the funds are concerned, «la quantité et la maniere dépend entièrement du bon plaisir du Czar.» Fair enough. But then, in an argument which will be repeated nearly word-for-word many times in future, Leibniz goes on to qualify his «entièrement»: «cependant», he notes, «il sera bon de se souvenir, que le temps est la plus précieuse de toutes les choses du monde», it is better to make progress with vigor, sooner, rather than paying later the price for «traisner longtems par une trop grand épargne», namely, «ce ne serait pas nous mais nostre posterité, que en goustera les fruits.» (Guerrier 1873, p. 16)

While the first recommendation applies everywhere, Leibniz' second recommendation is especially pointed for Russia. Since time immemorial, Russia had closed its doors to foreigners, suspicious always of their ways and intentions. But Leibniz makes the extremely germane point that, if Russia is to develop at all speedily, it must attract foreign talent, and, what's more, keep it. This will require significant change: «il faut revoke ou modifier les loix, qui les peuvent rebuter ou deguster et particulièrement celle, que les empêche d'entrer et de sortir librement.» (Guerrier 1873, p. 17)

Until now, Leibniz' tone has been businesslike, plainspoken even, and rigorously logical. But in the discussion of his third point – «faire venir des choses étrangères que le méritent» – his tone changes, becoming

almost lyrical in its grand statements. Clearly, this topic is one near and dear to Leibniz' heart. 17

The discussion here is three times longer than the longest other discussion (that of the first point). It contains an almost encyclopedic recitation of the new wonders of the West, and how they would merit importation and, perhaps even more importantly, exhibition, in Mother Russia. Here is a short excerpt from Leibniz' roll call of glories:

Les choses étrangères qu'on pourroit fair venir, seront des livres et instructions sur toute sorte de matières, des curiosités, rarités, et belles choses, qu'on peut propager ou imiter dans le pays. Ainsi il faudra des bibliothèques, boutiques de libraires et imprimeries, des cabinets de raretés de la nature et de l'art, des jardins des simple et ménageries, des animaux, des magasins of toute sorte de matériaux et des officines de toute sort de travaux. (Guerrier 1873, p. 17)

Birds, beasts, flowers, plants, herbs, trees, mirrors, glasses, tables, statues – «un trésor de la connaissance humain sur toute sorte de sujets» – nothing less, must be imported into Russia in order to bring about the most rapid transition from the medieval to the modern age.

Following these delightful paragraphs, Leibniz returns brusquely to business, listing the details required by his fourth through seventh recommendations. Of importance for us to note is his demand that the strictures on travel for Russians must be lifted, just as similar lifting was required for foreigners visiting Russia. Leibniz clearly believed that a totally free exchange of people and matériel was necessary to the foundation of a modern society based in science and the arts. Equally important is the notion that education is to be rationalized by centralization and standardization in schools and academies.

In his sixth point, Leibniz notes that knowledge of the country itself – via maps, resource inventories, navigational devices – is as important to Russia's future as is the knowledge it imports from outside.⁹ It is in this section of the memo that Leibniz first mentions an issue that he has great curiosity about, an issue which he later lures Peter into investigating, with very significant results unto our day. Among the most important things, Leibniz claims, which must be done in self-discovery is «reconnoistre les côtes sur tout dans le Nordest autant qu'il se peut, pour apprendre si l'Asie est jointe à Amérique, ou si on peut passer entre eux.» (Guerrier 1873, p. 19) It is to answer this curious question, echoed many times during their later discussions, which ultimately leads Peter to send Bering out

18 into the great northern sea, looking for the boundaries of Asia and America. (Hughes 1998, p. 312)

Leibniz' seventh and final point discusses the means Russia might use to supply what it lacks. Presumably, the deficits are those revealed by the self-discovery process discussed in the sixth point. Better agriculture, for example, can be fostered by learning how, first, to propagate better plants and animals, and then to cultivate them in more productive fashion than the present culture.¹⁰

As we will soon see, Leibniz' future planning does not move much beyond the program for Russia outlined here. It does, however, go deeper into detail, especially during the discussions between Leibniz and Peter at their personal meetings.

6. A Royal Wedding

Right at the end of December, 1708, Leibniz left Vienna in the company of the Russian ambassador, Baron Johann Christoph von Urbich. Leibniz' trip to Vienna had been a secret one, carried out at the request of his long time friend and benefactor, Duke Anton Ulrich of Brunswick-Wolfenbüttel. Ulrich wanted Leibniz to do some secret negotiating with Emperor Joseph I over the disposition of the bishopric of Hildesheim. (Aiton 1985, p. 274) But there was something else of interest to the Duke as well, something more personal. Ulrich had become convinced that not only would it be useful for Brunswick to become more intimately connected with the Russian empire, it would be particularly useful to marry off his granddaughter Charlotte during the process. Leibniz was commissioned to begin discussions of this proposal with von Urbich.

This was not a particularly delicate or difficult task for Leibniz. He and von Urbich had become quite close, for various reasons, over the years. During this period, in fact, the two were quite regular correspondents, exchanging every couple of months letters full of gossip and news of tactics and strategy in the seemingly unending series of wars, small and large. Moreover, von Urbich had asked Leibniz to bring to Vienna an abstract of his plans for Peter's developments, which the Hannoverian duly did. (Guerrier 1873, p. 95)¹¹ They got together to discuss the abstract and then discovered that both were interested in the marriage project. Once entangled in the project, there was nothing for it, but to change their departure plans in order to continue talking as they now travelled West together.

Over the next few months, the two plotters got thicker and thicker, sometimes exchanging letters every couple of weeks. Prospective players in the wedding came to have code names and numbers, elaborate plots about places and people were constructed, and, as always, religious sensibilities were of primary concern.¹²

In the end, the negotiations succeeded, and the two principals were dragged, kicking and screaming, to the altar. The wedding took place 25 October 1711, at Torgau (in present day Saxony), the Queen of Poland's castle. Although out of the way, this site had certain advantages, chief among which was that at Torgau «the ceremony could be private, without the necessity of inviting the King of Prussia, the elector of Hanover and other German princes», thereby eliminating the many complex niceties of protocol, and saving «time for the Tsar and money for the Bride's father.» (Massie 1980, p. 568)

Leibnitz got to Torgau early, on 19 October, and stayed until the end of the month. His hope was to see the Czar privately: «Bey etwa einer allergnädigsten Privat-audienz hoffet man einige nicht unangenehme particularia anzuführen.» (Guerrier 1873, p. 179) Leibnitz' hopes aside, there was no private audience. Nonetheless, progress was made. The two men spoke several times, and Leibnitz dined at the Czar's table. (Aiton 1985, p. 309) Although we have no record of these conversations, we have several 'talking -paper'¹³ documents in Leibnitz' hand, written before and during his stay in Torgau. It is clear that the Czar was receptive to Leibnitz' ideas: several of the talking-paper proposals were quickly acted upon – for example, preparations immediately began for making magnetic observations across the Empire, and providing language specimens from many of the Empire's peoples – and continued to be discussed at length in followup correspondence, especially with von Urbich. More importantly, it is also clear that Leibnitz fully engaged the Czar in his greatest project, namely, the modernization of Russia via development of education, science and the arts. In the end, the Czar bade Leibnitz develop a fully-worked out plan along these lines, to be presented the following year.

Although Leibnitz' ideas at Torgau do not differ much in substance from those we have already seen, there are some interesting new ways of expression. For example, in justifying his program to Peter, Leibnitz argues that doing things his way is best: «so bin ich versichert, dass in einem jahr mehr als sonst in zehen jahren und mit 10000 thaler. mehr als sonst mit 100000 ausszurichten.» (Guerrier 1873, p. 181) Obviously, such economies would appeal to the Czar!

It is evident in the two Torgau 'talking papers' that Leibniz has refined his program down to bare essentials. Whereas at Copenbrugge he focussed upon seven areas of development, he by now has compressed the seven into just three main focusses. First come the educational issues:

Wie die Studien zum Besten der Jugend im ganzen Russischen Reich nützlich einzurichten; damit diese nebenst den guthen Sitten, auch Sprachen, Jünste und Wissenschaften wohl erlernen möge.¹⁴ (Guerrier 1873, p. 178)¹⁵

Clearly, there is no significant difference between his notions here and those at Copenbrugge; but it is important to note how much more economically and sharply he states his goal.

Next he focusses upon Russia's need to assess and understand its own potential:

Weil solches grosse Land noch wenig untersucht, so köndten darinn vortrefliche observationes naturales, geographicae, Astronomicae und sonst gemach werden, so gleichsam einen Neuen Schaz der wissenschaften dargeben würden. (Guerrier 1873, p. 180)¹⁶

Of course, self-discovery is not only to Russia's benefit: A whole new scientific treasure chest will result from this. Finally, there is the issue of opening Russia up to the modern world:

Man köndte aus Europa und China den Kern der besten nachrichtungen zusammen bringen, und solche practice in des Czars Landen einführen und weil die Russen gehorsam und gelehrig, so würden sie dadurch auch viel geld in das Land bringen. (Guerrier 1873, p. 180)¹⁷

Achieving these three goals is still a question of structure and personnel, and, exactly as in the Copenbrugge proposals, Leibniz suggests a particular direction:

Zu erreichung dieser Hauptabsehen wäre ohnmassegeblich von Cz. M. ein eigenes Collegium zu fundiren und su privilegiren und mit einer gewissen Direction zu fassen, worüber dann zu deliberiren stünde. (Guerrier 1873, p. 178)¹⁸

Ultimately, the single college mentioned here will be developed into a complex structure of colleges, all under a central direction.

In addition to the three general focusses, Leibniz collects under the rubric «Particularitäten», eight specific items he would like Peter to consider doing. Among these are the magnetic observations and linguistic samples, which were indeed immediately acted upon. Other things took some time, for example, sending Leibniz' calculating machine to China, producing an air rifle, and exploring the coasts, especially the Asia-American interface.

By the time everyone had departed the Royal Wedding site, Leibniz and Peter were fully involved in the process of planning how to best modernize Russia. The first draft of Leibniz' plans were presented to the Czar one year later, in Karlsbad.

6. Appointment in Karlsbad

During the year between Torgau and Karlsbad, Leibniz was busy with many different things; yet, from the volume of his correspondence with interested parties, it is safe to say that his attention never much wandered from the Russian project. Leibniz had met – and stayed in contact with – a number of the Czar's close associates in Turgau, chief among them Bruce, the general in charge of the Russian artillery corps. Bruce had promised to make the navigational observations, as well as find linguistic specimens to send to Leibniz. (Guerrier 1873, p. 223) The correspondence between the two men becomes increasingly congenial as time goes on. And of course the close cooperation between Leibniz and von Urbich continued.

But chief among Leibniz' collaborators at this point was Schleiniz, who had joined Peter's court in 1711, as the ambassador from Herzog Anton Ulrich's Brunshvig-Wolfenbüttel, and soon became one of the Czar's favorites at court.¹⁹ Leibniz and Schleiniz had of course known and liked each other from earlier times. Leibniz was able to use Schleiniz as a direct conduit into the court, no matter where it was meeting.²⁰ This turned out to have a very important consequence in September, 1712.

Leibniz had sent Peter, via Schleiniz, a «mathematische Instrument», which the envoy finally was able to present to the Czar at Greifswald, where the court had paused on its way to taking the cure in Karlsbad. As Schleiniz reported, «der Zar wäre darüber so vergnügt gewesen, dass er das Instrument über eine halbe Stunde betrachtet und geprüft.» (Guerrier 1873, p. 141) Moreover, at the same time Bruce – of whom Schleiniz tells Leibniz «Je vous puis assurer que Mr. de Bruce est fort de vos amis» (Guerrier 1873, p. 226) – handed over to Peter his freshly translated copies of memoranda only just sent by Leibniz. These memoranda covered various topics, in-

22 cluding the disposition of the forces of the Northern Allies (a topic Bruce and Leibniz had become deeply involved in together), but their main focus was the Russian project. Peter read the memoranda immediately, Schleiniz reported, and concluded that most likely this time Leibniz' wish for a personal audience would be granted. (Guerrier 1873, p. 142)

Schleiniz was exactly right. In a letter dated only 2 days later, the happy diplomat writes to Leibniz, telling him not only that the Czar wishes to see him, but, even better, Peter was dispatching Schleiniz to Hannover to pick Leibniz up and accompany him on the trip to Karlsbad.

Of course things were not so simple as that; with the Czar, things never were. Schleiniz wrote Leibniz from Berlin, where he had arrived on the 15th of August. Next, the party was to travel to Greifswald, where they would linger during much of September, and on into October. At that point, when Peter felt ready, they would decamp for the cure in Karlsbad. Schleiniz would keep Leibniz posted, and ready to travel to the spa city.

Much is to be planned during the more than two months wait; thus we see a constant interplay of letters, proposals, memoranda, and gossip between Leibniz in Hannover and his contacts in the Czar's party, mostly Schleiniz and Bruce, although Huyssen and von Urbich are by no means neglected, either.

Much of the discussion concerns topics we have already spent time with. But Leibniz, in an undated 'talking-piece' translated for the Czar by Schleiniz in Greifswald, suggests that the entire modernization project should be centralized under a single council. The scope of his proposal is breath-taking:

Pour mieux réussir dans un si grand et si beau dessein, il seroit peut être à propos que Sa M. établit une espèce de conseil particulier, don't l'object fut en général le soin d'introduire, d'augmenter et de faire fleurir toutes les bonnes connoissances dans son Empire. De ce conseil dépendroient les académies et les sociétés savantes, les écoles, les imprimeries et libraires, le soin des langues avec les truchemens, l'Histoire et la Géographie tout interne qu'externe, l'instruction des artisans, mariniers, jardiniers, chymistes et autres; puis la correspondance avec les étrangers sur les lettres et sciences, les gazettes et almanachs, l'importation et la censure des livres, la formation des Bibliothèques et cabinets de raretés, les Observatoires et Laboratoires et quantité d'autres matières qu'il seroit de spécifier, et où l'on se peut rapporter en partie à l'exemple d'autres sociétés savantes ou Académies des sciences et des arts. (Guerrier 1873, p. 219)

It is clear that, by this point in developing his plan, Leibniz has decided upon a vast, thoroughgoing, and complex construction, from the ground up, of a New Russia, one which includes all of the modern knowledge and technology, plus the political-economic structures, then present only in Westernmost Europe.²¹

Yet Leibniz has by no means forgotten his initial, and very specific, interests that had first propelled him into involvement with Russia and its Czar. In a 10-page memorandum – ostensibly prepared for (and addressed to) Peter, but more likely presented to Bruce – Leibniz lays out exact (and exacting) instructions about his two favorite interests:

hiermit meine darüber habende gedancken etwas umbständlicher aussführen sollen. Der eine bestehet in Untersuchung der Sprachen in dem Czarishchen Reich und angrenzenden Landen der anderer in Beobachtung der Variation des Magnets in denselbigne. (Guerrier 1873, p. 239)

Among the details, for example, are the cities he wishes to see magnetic observations from, including «Mitau, Riga, Reval, S. Petersburg, Pleskau, Archangel und an einigen andern orthen längst des Eissmeers», plus the mouths of the Oby, Lena and the Jenissea, and «dann selbst zu Moscau, Kiow, Veroniza, Casan, Astrakan, Tobolsko, und ferner in den Russischen stationen nacher Siberien.» (Guerrier 1873, p. 246)

The document also includes a most thorough discussion of Leibniz' theory of language evolution, and how it can be used as an indicator of human history.²² (Guerrier 1873, p. 239-43)

But in his conclusion, Leibniz remarks – almost off-handedly – that in addition to the two main points he mentioned initially, there's an additional issue of interest to him, another navigational point:

Schliesslich will ich nechst der Sprachen und des Magnets noch eines *dritten Puncts* ...Nehmlichen de Welt ist noch biss Dato in Zweifel ob Asien gegen Norden ganz umschiffet werden können, oder ob es wie etlich vermeynen an America hange. Dieser Zweifelsknote kan von niemand besser als von Sr. Mt. Aufgelöset werden. (Guerrier 1873, p. 248)

It is this request, of course, which will eventually send Bering off on his great voyage of discovery, searching for an answer to precisely this Leibnizian question: can a ship sail around the far North of Asia, or are Asia and America bound up together?

At this point it is clear what the main agenda items will be for Leibniz and Peter in Karlsbad. First and foremost will be the discussions over Leibniz' ripening plans for the modernization of Russia, including the setting-up of schools, museums, academies, observatories, and, most importantly, the *conseil particulier* which will centrally supervise the entire process. Secondly, Leibniz' perennial favorites – linguistics and navigation – will be up for discussion and, he hopes, active disposition.

So much is clear, and none of it is surprising, given the history of the interactions between the two men until now. But, in fact, there is something new beginning between the two men, as Leibniz comes to take on a new advising role to the Czar. As Guerrier notes:

Doch es waren dieses Mal nicht allein Pläne wissenschaftlichen und civilisatorischen Inhalts, die er Peter dem Grossen vortrug. Leibniz trat in Karlsbad in einer neuen Rolle vor den Zaren, in der Rolle eines politischen Vermittlers zwischen Oestreich und Russland. (Guerrier 1873, p. 142)

This new direction is well-exemplified by several memoires and think-pieces composed by Leibniz immediately before the meeting.²³ While it is not entirely clear where this new aspect of the Leibniz-Peter relationship came from, two main forces are evidently at work. First, there's Schleiniz.

Over the year since Torgau, Leibniz and Schleiniz have become closer and closer, as noted above. One focus of their closeness is an ongoing incredibly-insider gossipy discussion about any- and everything of concern in Europe: courtly marriages, family disputes, money troubles, diplomatic errands and miscues, the list goes on and on. But, interspersed among the gossipy froth are very hard kernals of military intelligence, strategy, and tactics. Leibniz had an eye, an ear, and a mind for the military sphere and Schleiniz recognized it and came more and more to utilize it. For example, just a cursory look at the letter from Leibniz to Schleiniz of 23 Sept. 1712 (Guerrier 1873, pp. 227-232) reveals a extremely wide range of topics, from the actions of the Duke of Gloucester in regard to Lorraine, over the late arrival of the Polish Ambassador at the court in Constantinople, to the disposition of the forces of the Northern Alliance, this chatty missive contains a welter of highly suggestive and perhaps actionable intelligence. It is also clear that Leibniz and Schleiniz both knew what they were doing and, moreover, distinctly enjoyed it.²⁴ Unquestionably, Schleiniz, one of Peter's closest and most trusted advisors, was a direct conduit from Leibniz into

Peter's ears. Moreover, given that the advisor typically translated Leibniz' letters for Peter immediately upon their arrival,²⁵ it isn't a big leap to conclude that Peter himself enjoyed the correspondence as well.

A second key force behind Leibniz' new role was his old friend and patron, Duke Anton Ulrich. Ulrich had come to the conclusion that one of the best chances of beating France and her interests, most especially regarding the disposition of Alsace and Lorraine, would be to forge an alliance between Peter and the Emperor in Vienna. The Duke had broached the subject to Leibniz, found approval, and worked out a strategy and marketing campaign, official instructions for which were given to Leibniz in an undated (but probably October) letter. (Guerrier 1873, pp. 257-8) This was followed up by a bona fides introduction to the Emperor for Leibniz (Guerrier 1873, p. 259) and an advice to Peter about Leibniz' going on to Vienna to see the Emperor following the Karlsbad meeting. (Guerrier 1873, p 261-2) Ulrich specifically pointed out to the Czar that Leibniz could be trusted with undercover work. Thus was the stage set for a classic piece of secret diplomacy.

Part of the reason, then, that Leibniz was so eager to talk with Peter was to attempt to convince him to join in a politico-military alliance.²⁶

We have no details about the conversations at Karlsbad, although Leibniz did send brief reports to both Ulrich (Guerrier 1873, p. 281-2) and Sophie (Klopp 1864-84, 9:373-4; Guerrier 1873, p. 271-2) about events after they happened. One humorous exchange involved all three: Leibniz told Sophie that he was to become a kind of «Solon» for Russia, but that, since he preferred short laws to long ones the job wouldn't take all that much time. Obviously, Sophie told the Duke about Leibniz' 'solonity', since he immediately wrote to Leibniz that the whole idea amused him considerably. Leibniz just as quickly responded that «es ist mir lieb, dass ich E.D. ein wenig lachen gemacht, mit meinem Solone Russico, aber ein Russischer Solon hat der weisheit des griechischen nicht nötig.» (Guerrier 1873, p. 282-3)

Leibniz' elevation to 'Solon' is attested scrupulously by the patent, in Russian, signed by Peter on 1 November, as well as a German translation²⁷, (Guerrier 1873, pp. 269-271) both to be found in the Russian archives, and a letter announcing the commission, and agreeing to the secret diplomacy, sent by Peter to Duke Anton Ulrich on 12 November. (Guerrier 1873, pp. 273-4)

Naturally, the patent speaks not at all to Leibniz' new role as intelligence agent and secret diplomat; rather, it focusses completely upon Leibniz as a man to «die Studien Künst und Wissenschaften in Unserm Reich mehr un mehr floriren zu machen»; for this, Leibniz was to receive an annual salary of one thousand Thaler. (Guerrier 1873, p. 270-1)

Following their conversations, the Czar bade Leibniz to travel onward with him, toward Moscow. Leibniz did so, but only as far as Dresden. From there, he left for his secret meetings in Vienna.

Over the next four years Leibniz would further refine his plans for the Russian modernization, communicate with Bruce on the linguistic and navigational issues, and continue his secret diplomacy in Vienna and beyond. Only in their final meeting would Leibniz present Peter the Grand Scheme.

8. The Final Encounter

Bad Pymont advertises itself today as «The Bath of the Princes» – probably it should mention the Czar as well, since it was one of his favorite cure-places, most especially as the connections between his court and those of Hannover and Wolfenbüttel solidified. An easy day's travel southwest of Hannover, there in Bad Pymont the Czar was close enough, on the one hand, but far enough, on the other. It was here, in July 1716, that Leibniz and Peter met for the last time.

From what we can reconstruct, Leibniz spent about a week in Pymont conferring with Peter. In addition, during Peter's stays in Hannover with King George I²⁸ both before and after the halt in Bad Pymont, it appears that Leibniz also had occasion to meet and confer with the Czar.

But this meeting, unlike that in Karlsbad, has no big runup, no flurry of letters among all the participants. This meeting is considerably lower key and lower profile than the previous one. Indeed, Leibniz didn't know until the last moment which Kurort Peter had chosen – Pymont or Karlsbad – nor when, exactly, the Czar's party would arrive. (Guerrier 1873, p. 174) Moreover, Leibniz – «nach seiner Art» – has left us very little actual record of the subject of the two men's discussions, other than brief mentions he makes in letters to Bernoulli, Bourguet, and Teubner. According to these remarks, the two men spoke about the Asia-America connection issue, about the calculating machine, and, in a very interesting passage sent to Bernoulli, Leibniz talks about how effectively the cure worked for Peter, based on a follow-up examination of the color, thickness, etc. of the Czar's blood! (Guerrier 1873, p. 175)

Aside from these somewhat gossipy remarks, there are only three substantive documents associated with the meeting: A letter from Leibniz to Schafirof, dated 22 June 1716 from Pymont; an undated but dateable memorandum laying out Leibniz' thoughts on the magnetic observations; and, finally, an undated, but dateable twelve-page memorandum which constitutes Leibniz' final proposal for the «Verbesserung der Künste und Wissenschaften im Russischen Reich.» (Guerrier 1873, p. 348-360).

In his letter, Leibniz gave a brief resume to Shafirof of his activities since Karlsbad, and then, in a detailed P.S. laid out what looks almost like a 'table of contents' for the long «Verbesserung» memorandum. Seven points are called out for the Czar's action:

1. *Zum liecht in der alten Histori*²⁹ – the Czar can assist in bringing to light the correct history of his various peoples and their languages;

2. *Zu ausbreitung der Christlichen Religion* – the Czar can set up missions to the heathens in his lands;

3. *Zu verbesserung der Schiffart* – the Czar can support the magnetic studies;

4. *Zur beförderung der Astronomi* – the Czar can support the readying of new astronomical instruments, and, at the same time that the magnetic observations are being made, have other astronomical observations made;

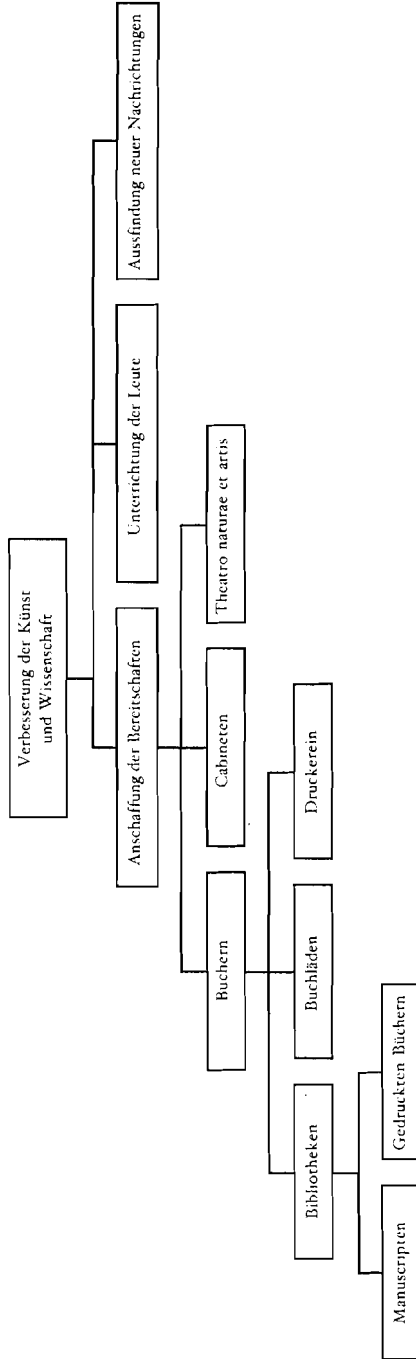
5. *Zur verbesserung der geographi* – the Czar can support further expeditions to determine whether Asia and America are connected;

6. *Zu vermehrung der physik oder Natur-kunde* – the Czar can support collecting and investigating minerals, plants and animals, not only in his own lands, but in nearby ones, and serving to increase commerce between them and Europe, India and China;

7. *Zu verbesserung aller Künste and Wissenschaften* – the Czar can support importing into Russia the core members of all Faculties and disciplines, and setting up the best means for skilled workers and professionals.

The third and fourth points are put into further detail in Leibniz' memorandum over the magnet needle. (Guerrier 1873, p. 346-8)

All the other points are covered in greater detail in the long «Vebesserung» memorandum. Leibniz has developed the memo in precisely – and tightly – organized structure. He begins by laying out three general foci of improvements, and then dividing, re-dividing, and re-re-dividing each focus a number of times. Although full examination of the whole document would take us far beyond our needs here, it is worthwhile to follow one particular line of development to its ultimate conclusion, thereby revealing both Leibniz' logic of attack on the problem, and some of



his substantive examples of solutions. Here is the structure of the first set of Leibnizian moves:

First Leibniz divides the problem into three foci: 1. Anschaffung der dazu dienlichen Bereitschaften; 2. Unterrichtung der Leute in den Wissenschaften; 3. In Auffindung neuer Nachrichten. Then, each of these three is divided, divided and divided again. Along with the title of each resulting division (as given in the boxes of the diagram), Leibniz frequently adds a small gloss or further explanation. For example, in the series «Anschaffung» – «Buchern» – «Bibliothek», Leibniz comments that «ein so grosser Monarch als der Czar eine so vollkommene Bibliothek as immer thunlich anzuschaffen trachten solle.» (Guerrier 1873, p. 349) What we have, in the end, is a massive scheme, organized down to the finest detail, about how a modern state is to properly set up its national research and teaching structure. There is no question that Leibniz has worked long and hard developing his plan; equally, there is no question that Peter – at least for all intents and purposes – welcomed Leibniz’ plan. What remains in question for us is ‘To what success, if any, did Leibniz’ plan come?’ Which is to say, ‘How successful was the relationship between one of that century’s finest minds, and one of its most enlightened absolute monarchs?’ We turn now to our conclusion.

9. The Outcome

Four months later, 14 November 1716, Leibniz died, never to see how his suggestions, recommendations, proposals, and projects with Peter and Russia fared, leaving it to history to appraise the outcomes. Yet appraising Leibniz’ effect on Russia is not an easy thing to do, if for no other reason than that his efforts are tied up so tightly with Peter, and thus, appraising Leibniz in Russia must also involve a least a bit of Peter-appraisal as well. But the historical judgment on Peter is still, even today, mixed, muddled, and controversial. From all indications of the present evidence, there is no settled opinion of Peter’s achievements and failures.

Nonetheless, some accounting of Leibniz’ work must be attempted, at least in part. Some things are fair enough to say, even given the mixed state of affairs. For example, evaluation at the extremes most certainly is inaccurate – we know enough to know, for example, that Troyat’s opinion, no matter how respected his work might be, rings false:

After meeting Leibniz several times during his travels, he called him his ‘intimate adviser’, but he failed to carry out any of Leibniz’ broad plans. The

philosopher seemed to be soaring in the clouds, while Peter wanted to feel the earth under his feet at all times....Peter was annoyed by the man's conceit. Incapable of appreciating the subtleties of this far-reaching intelligence, he regarded the father of differential calculus as nothing more than a schemer greedy for honors and sinecures. (Troyat 1987, p. 264)

Several of Troyat's claims are clearly wrong. As we shall see immediately, a number of Leibniz' plans, including one – setting up the Russian Academy of Science – which must be called «broad» in any interpretation, were explicitly and precisely carried by Peter's orders. Moreover, as we have seen illustrated a number of times, according to the witness of the likes of Schleiniz, Bruce, and von Urbich, Peter eagerly awaited Leibniz' letters, having them translated and read to him immediately upon their arrival. This is hardly the behavior of an annoyed man; nor is it the behavior of a man who is «incapable of appreciating the subtleties» of his correspondent!

Troyat's judgment, then, must be rejected: it is extreme, and both wrong and wrongheaded.³⁰

Benz' judgment of Leibniz' achievement is also generally negative, though by no means so negative as Troyat's; more importantly, Benz' analysis is careful and well-grounded. Curiously enough, Benz' discussion does not focus specifically upon any of the Leibnizian projects – for example, the Asia-America connection or the compass determinations (although he does in passing refer to the linguistics project) – but contents itself solely by discussing the failure of Leibniz' plans for Russia in general.

According to Benz' argument, there are two reasons for Leibniz' failure to produce a workable plan for the total reform of science and education in Russia. The first is Leibniz own ignorance about what Russia was actually, really, like. Thus, in spite of the fact that

Leibniz war einer der wenigen deutschen, ja europäischen Gelehrten seiner Zeit, die sich wirklich bemüht haben, Rußland zu studieren und dieses unbekannte Reich im Osten soweit als möglich zu begreifen...wußte er für die gewaltigen Projekte, die er für Rußland entwarf, von Land und Leuten zu wenig. (Benz 1947, p. 83)

In the end, it counted enormously that «Leibniz hat Rußland niemals bereist und kannte das Land nicht aus eigener Anschauung.» (Benz 1947, p. 83) In Benz' view, it was this lack of personal experience which allowed

Leibniz – totally mistakenly – to think of Russia as a ‘tabula rasa’, a necessary condition for any possible success of his total reform plans.

In fact, Russia was not only not a tabula rasa, it was a tabula with implacable institutions writ deep, as if written in stone. Chief among these was the Orthodox Church. Although Leibniz innocently believed he was having useful discussions with Javorsky, the Metropolitan of Moscow and thereby head of the Church, in actual fact «Leibniz hatte wohl keine Ahnung von dem tiefen Haß und Mißtrauen, das Javorsky dem Vorschlag des Lutheraners Leibniz entgegenbrachte.» (Benz 1947, p. 84fn) There was never much chance, according to Benz, that Leibniz’ total reform could be accomplished, given the entrenched power and resistance of the extant Russian culture.

But Leibniz’ ignorance of the Russian reality wasn’t the only problem: «Ein zweiter Mangel aber wird deutlich, wenn man untersucht, welchen persönlichen Leibniz seine Kenntnis Rußlands verdankt.» (Benz 1947, p. 85) Leibniz’ contact with Russian people was contact all and only with Peter’s people – beginning, of course, with Peter himself! An exhaustive list can be given of those whom Leibniz interacted with, from Golovkin, Trubetzkoy, and Kurakin, to Safirov, Schleiniz, and Bruce, etc. etc. etc., and each and every one, to a man, is Peter’s man. What Peter believed, they believed; and so, consequently, Leibniz himself came to believe. Peter thought he could effect a complete reform of Russia, his men went along with the idea, and Leibniz himself came to believe it, deeply and fully.

Ultimately, these two constraining limitations determined the failure of Leibniz’ plans for total reform.

Darin liegt die Grenze der Rußlandpläne Leibnizens: er hat nur das petrinsche Rußland gekannt in der Person Peters und seiner Umgebung und seiner offiziellen Vertreter, aber nicht das andere Rußland, das alte Rußland das den petrinschen Reformen einen so zähen und verschlagenen Widerstand entgegenstellte und sein Werk als Teufelswerk ablehnte... (Benz 1947, p. 88)

It cannot be denied that Benz’ analysis of the reasons for the failure of Leibniz’ most ambitious reform plans rings true. Yet, it seems to me that his conclusion of failure in general, failure overall, is too strong. We have clear evidence that at least some of Leibniz’ particular, and abiding, projects, were eventually and satisfactorily carried out.

Guerrier focusses upon three: the exploration of the interface between Asia and America, the establishment of the Russian Academy of Science

32 in St. Petersburg, and the compass observations. In each case, he finds that there is good reason to say that Leibniz' efforts had recognizable, albeit limited, success. First, the expedition:

Endlich im letzten Jahr seines Lebens beschloss Peter, zu rein wissenschaftlichen Zwecken eine Expedition nach Sibirien zu schicken – um die Grenzen zwischen Amerika und Asien festzustellen – worauf Leibniz so oft bestanden hatte... (Guerrier 1873, p. 191)

Certainly, the Bering expedition can be counted a full Leibnizian success.

The case of the academy is more complicated to decide, since, first, there is no single document that we can point to and say 'yes, it is here, in this Denkschrift, that Leibniz' plan for the academy appears; and, secondly, it is quite clear that the eventual organization of the academy differs in part from Leibniz' typical recommendations. Nonetheless,

Deswegen kann das älteste wissenschaftlich Institut in Russland wohl mit gutem Grunde auf die Ehre Anspruch erheben, dass unter den Namen der Männer, die zu seiner Gründung beigetragen haben, auch der unsterbliche Name Leibniz's glänzt. (Guerrier 1873, p. 194)

Finally, the third Leibnizian task was not finally accomplished, Guerrier claims, «bis ein anderer, Leibniz verwandter Geist – Alexander Humboldt den Anstoss dazu gab», and this in the earliest years of the 19th Century. (Guerrier 1873, p. 194) This is not to say that expeditions were not sent, and observations made, in the middle and late years of the 18th Century: both these things happened. But success in obtaining dependably useful data did not occur until Humboldt's work. Significantly enough, Humboldt's plan explicitly followed Leibniz' own, including the latter's design for fixed magnetic observatories supported under the St. Petersburg academy's aegis. (Guerrier 1873, p. 194) Thus, although it took over a century, Leibniz' plan was ultimately instituted, and succeeded.

Comparison between Benz' judgment and Guerrier's judgment of Leibniz' achievement suggests that Benz' negative evaluation is too wide and too strong. Guerrier's three cases show that, indeed, Leibniz' plans had some distinct successes to show, albeit over a longer time interval than the Hannoverian might have wished for.

Thus, in the final analysis, Leibniz' hopes for Russia had only mixed success; yet, most certainly the entire episode was positive in effect. Katasonov's judgment is clearly just and appropriate:

Leibniz didn't know Russia very well, and because of that he mistook many things. However, one cannot ignore the sincerity of the great man, who really believed the human reason and good will, science and enlightenment to be enough to resolve all the tragic contradictions of human existence. Leibniz was like a hostage and martyr of the idea of Enlightenment. His tireless activity for the realisation of his political and cultural plans failed in much of Europe. For Russia Leibniz's propaganda of science and civilisation doubtlessly played a positive role...However, Russia with its special understanding of truth and culture, rooted in Orthodoxy, was the natural limit of theories of Enlightenment, of rationalistic ideology. In life everything was more complicated than in theory. (Katasonov 1994, p. 181)

Leibniz' plans for Russia took him, finally, «zu einer letzten Steigerung seiner selbstlosen Hingabe an einen Dienst an der Menschheit führte.» (Benz 1947, p. 3) No more could be asked of any philosopher.

Notes

- ¹ Although an older, more mature Leibniz seemed to be somewhat uncomfortable with this early exercise, his discomfort does not arise from the novel and original mathematical method: as Aiton notes, «in later years, Leibniz valued the writing for this alone.» (Aiton 1985, p. 26).
- ² In a fascinating footnote, Benz remarks that Leibniz himself had written in his own hand on a copy of the Specimen «Lithuanus (sub hoc nomine latet Godefredus Guilelmus Leibnitius)» and goes on to note that «die Anfangsbuchstaben G.U.L. stimmen überein.» (Benz 1947, p. 4 fn.).
- ³ Although Leibniz was interested in language for its own sake, his greater goal was to discover the history of the human race by tracing the development of language. (Campbell (in press) p. 3) An example can be seen in the 1712 «Aufsatz von Leibniz über den Ursprung der Europäischen Völker». (Guerrier 1873, p. 210–213).
- ⁴ De Mauro and Formigari (1990) traces the development of this methodology from Leibniz to Humboldt.
- ⁵ Which is not to say that his vision was correct. Benz argues that in spite of his knowing more Russians, and better, than any other European thinker of his age, Leibniz still got it wrong. (Benz 1947, p. 86) Although I think Benz' judgment of failure too harsh, it still has a solid ring of truth about it. Further discussion awaits the conclusion.
- ⁶ 1672-1725† Czar: 1682-1721; Emperor: 1721-25.

- 34 ⁷ Leibniz' characteristic optimism here overpowers his general wisdom. Of course Russia—contrary to Leibniz' notions here— has old structures, and, naturally enough, for everything, from education to religion to politics to cuisine. Leibniz has mistaken the absence of modern structures for the absence of structures per se. Nothing could be further from the truth. A long proud peasant culture, tied to an equally long, equally proud religious culture, in fact comprised not a clean slate, but rather something much more like being graven in stone. Benz: «Leibniz wußte nicht...daß sich die alte, kirchliche Form des Russentums mit Leib und Seele und Geist gegen die Neuerungen Peters sträubte.» (Benz 1947, p. 87) .
- ⁸ Guerrier notes that the eventual disposition of this Denkschrift, and two counterpart Concepts (notes or abstracts) written on this same occasion is unknown. It may have been that one of the abstracts ended up in Le Fort's hands. But the ultimate fate of the important memo is even less well-known, although Guerrier thinks that it may have been sent later to Holland where the Czar was staying. (Guerrier 1873, p. 14).
- ⁹ Here Leibniz strikes on a hot iron. As recently as the year before, a decree had gone out from Moscow to make two large canvas maps of the towns, villages, and roads of Siberia, because there were none yet extant. In general cartography was the first of the sciences to develop under Peter. (Hughes 1998, p. 312).
- ¹⁰ The ultimate consequence of this recommendation comes when it is linked up to the second recommendation in Catherine the Great's proclamation of 1762, inviting foreigners—especially Germans—to come live in Russia, in order that they might bring their superior techniques and matériel to aid in the Mother Country's development. The definitive account of this migration is Gerd Stricker's *Deutsche Geschichte im Osten Europas, Rußland*, Berlin: Siedler Verlag, 1997. A very accessible video series and teaching guide *Germans from Russia: Children of the Steppes, Children of the Prairie*, is available from North Dakota State University/Prairie Public Television at <http://www.prairiepublic.org/features/GFR/video.htm>.
- ¹¹ This abstract is interesting in that it focusses upon the precise logic and order of the educational subjects to be learned by the Russian youth in their modern new world. As Leibniz remarks «Die wahren Studien bestehen theils insonderheit in erzichung der jugend zu einem tugendhafften wandel, und darbey auch in unterrichtung in Künsten und wissenschaftten.» (Guerrier 1873, p. 99).
- ¹² The Elector of Mayence, for example, who had an eligible and therefor rival daughter, became «57»; the Czarevich became «Prince Charles». (Guerrier 1873, p. 101; p. 115) The Czarevich Alexis was extremely devout. How then to finesse Charlotte's Lutheranism? what about any children? etc. (Trovat 1987, p. 202)
- ¹³ Guerrier #126 and #127; pp. 176-183
- ¹⁴ Compare to the other notes' version: «Weil es in russland mit den Studien gleichsam noch Tabula Rasa, es köndten alda die besten anstalten von der Welt gemacht werden, zu unterweisung der jugend in Sprachen und Wissenschaftten.» (Guerrier 1873, p. 180)
- ¹⁵ Point 5 and elements of Point 1 at Copenbrugge
- ¹⁶ Points 6 and 7 at Copenbrugge.

- ¹⁷ Points 2, 3, and 4 at Coppenbrugge. .
- ¹⁸ While this was the major thrust of Coppenbrugge's Point 1, it now has become an overarching programmatic methodology.
- ¹⁹ Schleiniz was instrumental in working out the details of the betrothal and subsequent marriage of the Czarevitch. His diplomatic skills endeared him to Peter, and they were soon quite close. (Massie 1980, p. 549)
- ²⁰ It is clear from the datelines on his correspondence that Schleiniz accompanied Peter as the Czar moved restlessly about Europe during 1711-1712.
- ²¹ Utermöhlen's comment is well-taken: «Leibniz' Rußlandprogramm war sicherlich in vielem träumerisch, aber sicherlich war es auch das komplexeste.» (Utermöhlen 1994, p. 309)
- ²² Leibniz' methodology for the project is included in an aide-de-memoire that Leibniz apparently made for himself either just before Karlsbad, or during it (Guerrier 1873, pp. 272-33). The desiderata mentioned therein were passed on to Bruce, and recalled in summary in Leibniz' letter to Golofkin, 6 Nov. (Guerrier 1873, pp. 274-276) In essence, the method involved translating the Decalogue into the target language, along with a minimal grammar and dictionary of the language.
- ²³ Cf. Guerrier's Nos. 147 and 148. (Guerrier 1873, pp. 214-18)
- ²⁴ Their letters invariably contained a PS, and frequently more than one.
- ²⁵ A task also frequently done by Bruce, who, as correspondence clearly reveals, is involved as well with Leibniz in discussion of military and strategic issues. Thus, both Bruce and Schleiniz are conduits to Peter of Leibniz' intelligence affairs.
- ²⁶ While the conduct and consequence of this bit of Leibnizian diplomacy is of great interest in itself, further discussion on the topic would take us far afield from our main concerns. Hence, we must leave further remarks for another day. However, a good place to begin would be Leibniz' memoir concerning «ein zu errichtendes Bündniss swischen Peter d. Grossen und dem Kayser Karl VI». (Guerrier 1873, p. 264-66)
- ²⁷ Corrected by Osterman: Guerrier, p. 270fn.
- ²⁸ Leibniz' boss, Georg Ludwig (son of Ernst August and Sophie), the former Elector of Hannover, had become King George I of England just two years earlier. Leibniz conspicuously did not accompany the royal company to England, in part because Georg had never much liked him, in part because he (Georg) was still angry about Leibniz' unaccounted absence in Vienna following Karlsbad, and most likely in part because of the nasty row going on between Newton's henchmen and Leibniz over priority for the calculus. In any case, Aiton seems to think that bad feelings between the two had somewhat healed by the time of Peter's visit in Hannover. (Aiton 1985, p. 325) No matter, Leibniz still did not get to go to England
- ²⁹ Italics in original
- ³⁰ Kirsanov 's judgment rings far truer to our ears: «There is no doubt that, in general, Leibniz's propositions were very welcome by Peter and his associates. A systematizer par excellence, Leibniz constructed his propositions according to a strict hierarchical system, and it coincided perfectly to the intentions of the Tzar.

- 36 In Russia, it was impossible to establish something like the Royal Society or the English education system due to other historical and social conditions. Leibniz understood that perfectly and counted only on the Tzar who like Almighty Lord would create the Enlightenment in the country.» (Kirsanov 1994, p. 185)

Bibliography

- Aiton, E. J. 1985. *Leibniz: A Biography*. Briston: Adam Hilger.
- Benz, Ernst. 1947. *Leibniz und Peter Der Grosse*. Berlin: W. de Gruyter.
- Campbell, Lyle. In press. *Why Sir William Jones got it all Wrong, or Jones' Role in how to Establish Language Families*. Festschrift/Memorial volume for Larry Trask, ed. by Joseba Lakarra
- Eco, Umberto. 1996. *The Dream of a Perfect Language*. Address before the Italian Academy, Columbia University, New York, November 26.
- Gottfried-Wilhelm-Leibniz-Gesellschaft. 1994. *Leibniz und Europa : Vorträge*, VI. Internationaler Leibniz-Kongress, Hannover, 18. bis 23. Juli 1994. Teile I, II.
- Guerrier, Woldemar. 1873. *Leibniz in Seinen Beziehungen zu Russland und Peter dem Grossen*. (St. Petersburg/Leibpig: Akademie der Wissenschaften; reprinted 1975, Hildesheim: Gerstenberg)
- Huges, Lindsey. 1998. *Russia in the Age of Peter the Great*. New Haven: Yale University Press.
- Katasonov, Vladimir. 1994. *The Utopias and the Realities: Leibniz' Plans for Russia*, in Gottfried-Wilhelm-Leibniz-Gesellschaft, 1994, T.II, pp. 178-182.
- Kirsanov, Vladimir S. 1994. «*Leibniz' Ideas in the Russia of the 18th Century*», in Gottfried-Wilhelm-Leibniz-Gesellschaft, 1994, T.II, pp. 183-190.
- Leibniz, G.W. 1923 - . *Sämtliche Schriften und Briefe*. Berlin: Akademie Verlag.
- Klopp, Otto. 1864-84. *Die werke von Leibniz*, 11 vols. (vols. 7-11 reprinted 1970-73; Hildesheim: Olms)
- Massie, Robert K. 1980. *Peter the Great: His Life and World*. New York: Knopf.
- de Mauro, Tullio and Lia Formigari. (1990) (Eds.) *Leibniz, Humboldt, and the origins of comparativism*. Amsterdam: John Benjamins.
- Troyat, Henri. 1987. *Peter the Great*. Trans. Joan Pinkham. New York: Dutton.
- Utermöhlen, Gerda. 1994. «*Leibniz im brieflichen Gespräch über Rußland mit A.H. Francke und H.W. Ludolf*», in Gottfried-Wilhelm-Leibniz-Gesellschaft, 1994, T.II, pp. 304-9.