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Science and Medicine in Liudmila Ulitskaia's Kazus Kukotskogo

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Honors, 2015

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Introduction

Liudmila Ulitskaia won the Russian Booker Prize in 2001 for her novel *Kazus Kukotskogo* (*Казус Кукоцкого*). The novel is divided into four parts which, broadly speaking, follow the life of Pavel Alekseevich Kukotskii, a gynecologist born before the revolution who lives much of his life in the Soviet period. Meditations on science, and particularly on medicine and biology, lie at the heart of the work. Indeed, Ulitskaia — who herself trained and worked as a geneticist until she lost her job for circulating samizdat — establishes the importance of medicine for the Kukotskii family with the very first sentence of the novel. “From the end of the seventeenth century,” she writes, “all of Pavel Alekseevich Kukotskii’s ancestors on his father’s side had been doctors” (“с конца семнадцатого века все предки Павла Алексеевича Кукоцкого по мужской линии были медиками”) — and highly decorated and successful doctors at that. Pavel Alekseevich himself becomes fascinated with human anatomy at an early age, and he studies medicine at university “with the same passion with which a gambler gambles or a drunk drinks” (“с той же страстью, с какой игрок играет, пьяница пьет”).¹ Pavel Alekseevich’s profession as a doctor constitutes a major part of his identity and is central for the novel as a whole.

Many of the main characters in the novel, and several of the important minor characters, study some form of science, whether applied (like medicine) or more theoretical (like biology). Pavel Alekseevich’s adopted daughter Tania shows great promise as a

¹ Ulitskaia, Liudmila. *Kazus Kukotskogo. Tot i etot svet: romany, povest'* (Moskva: Astrel', 2013, 411-862), 413, 417. All subsequent references will be to this edition and will be indicated within parentheses in the main body of my text.

research biologist, his best friend is the brilliant and energetic geneticist Il'ia Iosifovich Gol'dberg, Gol'dberg's twin sons Vitalii and Gennadii are scientific "wunderkinds," and Gol'dberg meets his second wife Valentina when she arrives as an assistant in his laboratory. Even Toma Polosukhina, a character whom Ulitskaia subtly derides for her lack of intelligence and depth, strives for a doctorate in botany. Indeed, as few as three non-scientists are to be found among the central characters of *Kazus Kukotskogo*: Pavel Alekseevich's wife Elena, the Kukotskiis' uneducated nanny Vasilisa, and Tania's saxophone-playing lover Sergei, all of whom are important exceptions.

Perhaps the frequency with which we meet scientists and doctors is not that extraordinary for a novel set in the Soviet Union. After all, as Loren Graham notes, the Soviet Union in the 1960s had the highest number of physicians per capita in the world with the possible exception of Israel. Graham further writes that "by the 1980s there were more scientists and engineers in the Soviet Union than in any other country in the world."² That said, we cannot chalk up the number of scientists and physicians in the novel to coincidence: Science — not just scientists, but their work, the object of study itself — is simply too pervasive a theme to ignore. It is not just that there are scientists and doctors, but what is more, they have widely varying relationships to their work, and their differing attitudes shed important light on individual characters and on larger issues in the novel. Ultimately, science serves as a vehicle by which Ulitskaia analyzes her characters and is able to concretely

² Graham, Loren R. *Science in Russia and the Soviet Union: A Short History*. New York: Cambridge University Press, 1993), 248, ix.

approach questions of morality, identity, social change, and even religion and mysticism in *Kazus Kukotskogo*.

Surprisingly little has been written about *Kazus Kukotskogo* to date. This is perhaps understandable, as the novel is still fairly new, and it raises questions about a host of complicated and thorny issues including abortion, sex, and reproduction — in a multifaceted, non-dogmatic way. My goal in writing about the role of science and medicine in the novel is to begin to redress this relative neglect and to tackle some of the questions Ulitskaia raises. This paper is divided into four main sections: science as it relates to social issues (particularly focusing on Pavel Alekseevich and Il'ia Iosifovich); science as it relates to morality; science as it relates to identity and family relationships; and science as it relates to religion and mysticism. *Kazus Kukotskogo* is a big novel with many themes and subtleties, so I make no claim that I provide the final word on any of these topics. In particular, in the last section on religion and mysticism I touch upon Part Two of the novel, which, though short, is a dense, deep, and enigmatic piece of writing that would require many more pages to explicate fully. I believe that the path to understanding the novel more fully would begin with a thorough exegesis of Part Two.³

Kazus Kukotskogo is, among other things, a historical novel. In roughly four hundred and fifty pages Ulitskaia covers much of twentieth-century Russian history, beginning with the end of the imperial rule and leading up to the late Soviet period. In the process she gives the reader a panoramic view of the Soviet Union through the twentieth century. We see the Bolsheviks target those with ties to the tsarist regime when Pavel Alekseevich is expelled

³ I am grateful to Tom Newlin for his help and suggestions; most, if not all, of the ideas expressed in this paper began with our conversations.

from university because his father served in the imperial army; we see the persecution under Stalin of Jewish scientists like Gol'dberg and outsider groups like Elena's Tolstoyan family; we see Tania's participation in the emerging Western-inspired counterculture of the 1960s; we see communal living, poverty and inequality, and threats from the KGB; we see Old Believer communities, Stalin's funeral, and everything in between.

According to Tatiana Keeling, "in Ulitskaya's works the political, social, and economic events — history on a large scale — are placed on the periphery of the narrative, while the center is occupied by psychological portraits of the characters who are engrossed mostly in their own private problems. Rather than focusing on history, Ulitskaya uses it to shed light on and emphasize the importance of private affairs."⁴ It is certainly true that in *Kazus Kukotskogo* Ulitskaia privileges the personal lives of her characters over their historical surroundings; that said, though, Ulitskaia certainly does not ignore the social questions that arise with her depictions of Soviet history. Rather, she confronts these issues quite directly. She considers, among other things, the effects of Soviet repression on the Russian population, the role of religion in the atheist USSR, generational divides, and, maybe most prominently, abortion and reproductive rights. As a biologist by education, Ulitskaia views many of these issues from a scientific perspective. Pavel Alekseevich, Gol'dberg, and other of the novel's scientists often come face to face with social questions as they relate to their work, and it is through their eyes that Ulitskaia frames much of her discussion of societal concerns in the USSR. There are, it should be said, important precedents in

⁴ Keeling, Tatiana V. *Surviving in Post-Soviet Russia: Magical Realism in the Works of Viktor Pelevin, Ludmila Petrushevskaya, and Ludmila Ulitskaya* (Ann Arbor: Proquest, UMI Dissertation, 2008), 180.

twentieth-century Russian history of the scientist-as-social-critic and even moral authority, with Andrei Sakharov as a prominent example.

Pavel Alekseevich and the Question of Abortion

The first and perhaps most striking example of a scientist struggling with the problems of Soviet society is Pavel Alekseevich's engagement with the question of abortion. Pavel Alekseevich's interest in pregnancy and birth traces back to his very childhood; indeed, his passion for medicine begins with the three anatomy tomes in his father's library, each of which contained an image of a naked man and an "attractive but robustly pregnant lady with her womb laid open for inspection of the fetus" ("благообразной, но сильно беременной дамы с распахивающейся для ознакомления с плодом маткой"; 414). This naked woman at once fascinates and embarrasses the young boy — he "hid his investigations from the household, fearing being caught in something bad" ("скрывал от домашних свои исследования, боясь быть уличенным в нехорошем"; 414). As a medical student Pavel Alekseevich specializes in gynecology, and his first research deals with a certain type of miscarriage. He never loses his fascination with all aspects of pregnancy and childbirth: "The mystery of conception," Ulitskaia writes, "this is what interested him. Nothing more and nothing less" ("Тайна зачатия — вот что его интересовало. Не более и не менее"; 552). He attains a measure of renown in his field, and is summoned in the early 1940s to counsel the state on matters of public health. It is at this time that he turns his attention to the question of abortion, which had only recently been outlawed in the USSR.

As Libor Stloukal details in his article "The Politics of Population Policy: Abortions in the Soviet Union," the first wave of Soviet lawmakers adopted liberal policies towards abortion and the family. Indeed, a 1920 law made abortion legal and free for all women in

the first trimester of pregnancy, provided that the operation was performed in a Soviet hospital and not privately. However, Stloukal notes that this liberalism was more a function of pragmatism than of principle: “Apparently, it was the feeling that legislative punishment was useless and only drove the abortion practices underground that prompted the government to adopt relevant measures.”⁵ Furthermore, the act legalizing abortion was from the start intended as a temporary measure; the goal all along was to achieve an idealized socialist society in which the desire for fertility control would itself disappear as a relic of the capitalist past. This did not come to pass, however, and Stalin’s government became concerned by falling birth rates during the period of industrialization and collectivization, a time when a large and healthy population was desperately needed. Thus, in 1936 the Soviet Union outlawed abortion, with the supposed aim of “protecting the health of Soviet women against injuries resulting from abortions, as revealed by medical evidence that was previously neglected.”⁶ Harsh penalties were instituted for both the women who sought abortions and the doctors, qualified or not, who performed them. Illegal abortions persisted, of course, and how dangerous they were can be inferred from the observation by Christopher Williams that even legal procedures later in the Soviet period suffered from “unhygienic conditions, poor quality of care and shortage of doctors and beds in medical establishments.”⁷ It is in this atmosphere of brutal punishments and risky, often deadly underground abortions that Kukotskii begins his study of the abortion question.

⁵ Libor Stloukal, ‘The Politics of Population Policy: Abortion in the Soviet Union’, *Working Papers in Demography*, no. 43, (Cranberra: Australian National University, Research School of Social Sciences, 1993), 8.

⁶ Stloukal, 12.

⁷ Christopher Williams, ‘Abortion and Women’s Health in Russia and the Soviet Successor States’, *Women in Russia and Ukraine*, Ed. Rosalind Marsh (NY: Cambridge University Press, 1996), 142.

In light of this climate, it is natural enough that Pavel Alekseevich quickly becomes interested in abortion not only from a medical point of view, but from a social and ultimately ethical one as well. As a sensitive man and an active medical practitioner, he keenly feels the effects of illegal abortions on a personal and societal level. He well understands that the “underground” abortions taking place at that time are not simply dangerous for the individual, but are in fact harmful for the Soviet population as a whole. While looking over troubling trends in Soviet demographics, he notes a factor that the official statistics ignore but that is as significant as the heavy death tolls of the war, namely, that “a great number of women of childbearing age were dying from criminal abortions” (“большое количество женщин репродуктивного возраста погибало от криминальных абортот”; 435). To Pavel Alekseevich’s mind, these “criminal abortions” are unnecessarily dangerous and, what is more, unavoidable under a total ban. Indeed, Pavel Alekseevich believes that the combination of men lost in the war and women lost to illegal abortions — either because they died of unsafe procedures or because they were sentenced to prison — makes abortion a matter of pressing importance both medically and socially.

Pavel Alekseevich foresaw that after the war serious upheavals would take place in the very institution of the family, and he expected the appearance of a large number of single mothers. He viewed this fact as a social inevitability and even as a public good. He considered the introduction of various benefits for single mothers to be necessary, but at that he held that the first step should be the repeal of the act from July of 1936 that banned abortions.

Павел Алексеевич предвидел после войны серьезные потрясения самого института семьи, ожидал появления большого количества матерей-одиночек и рассматривал это явление как социальное неизбежное и даже общественно полезное. Он считал необходимым введение разнообразных льгот для матерей-одиночек, но при этом полагал, что первым шагом должна быть отмена постановления от июля 1936 года о запрещении абортот. (436)

Pavel Alekseevich begins to use his position as a counsel on public health to agitate for the legalization of abortion. In his professional life, he refuses to turn over to the police those

who come to him after botched “underground” abortions — he only reports those who die from the procedure. Thus the social side of the debate around abortion becomes a major part of his work, and in the end it impacts not only his career but his personal life as well.

Pavel Alekseevich’s work with abortion culminates in two important scenes in Part One of the novel. The first of these takes place when he is trying to rework public health programs and bring about the legalization of abortion. He becomes frustrated when the minister of public health, an old, childless, “party” woman nicknamed “Koniaga” (“Коняга,” or “nag”) continually refuses to consider his plan. Koniaga is an interesting character in her own right as a woman in a powerful position. She is described as the only woman who is high up in the government, and “undoubtedly ... the main woman of the country and a symbol of women’s equality and the embodiment of March 8” (“несомненно, она и была главной женщиной страны, символом женского равноправия и воплощенным Восьмым марта”; 437). There is, of course, irony here, and it is noteworthy that a number of details ascribe to Koniaga masculine — or, at least, not traditionally feminine — qualities: her nickname Koniaga, remarks she makes about herself when drunk (“Yes, yes, the Russian woman — a horse with balls, everything is in her power!”, “Да, да, русская женщина — конь с яйцами⁸, ей все по силам!”; 437), and the fact that she, like other would-be embodiments of March 8, is not a mother. Ulitskaia seems to suggest that a Soviet woman of Koniaga’s era had to forsake her femininity for her successful career. Regardless, following her initial support for Pavel Alekseevich’s reforms, Koniaga, understandably, fears the risk involved in pushing through his ideas; she worries they are simply too radical for the current government. After a year without progress, Pavel Alekseevich goes over Koniaga’s head and

⁸ A vulgar expression for a strong, masculine woman.

writes directly to the Communist party. Doing so earns him an unexpected (and mandatory) “invitation” to the Central Committee to meet with a party official.

Pavel Alekseevich enters this meeting with a plan: He wants to demonstrate to the party official the negative effects of illegal abortions, and to do so in a particularly dramatic and affecting fashion. He presents the party official with a jar, in which is preserved in formaldehyde a womb that was removed due to an especially dangerous “home recipe” for inducing miscarriages. Ulitskaia provides this description:

Within the uterus was a sprouted onion. The monstrous battle between the fetus, entangled in thick colorless threads, and the translucent, predatory little bag, which probably looked more like a sea creature than a normal onion used in a soup or vinegret, had already ended.

Внутри матки находилась проросшая луковица. Чудовищная битва между плодом, опутанным плотными бесцветными нитями, и полупрозрачным хищным мешочком, напоминавшим скорее тело морского животного, чем обычную луковку, годную в суп или в винегрет, уже закончилась. (440)

The party official — who remembers, incidentally, that “his own wife resorted to something of the sort before the war” (“до войны и его жена прибегала к чему-то такому”; 441) — is of course horrified by what he sees: an ordinary onion, itself growing like the fetus, shedding its normal role in the kitchen in order to “battle” with a developing child. Pavel Alekseevich seizes the bureaucrat’s repulsion as an opportunity to expound on the societal ills that the ban on abortions causes. He cites the deaths of potential mothers and the rise of orphans with the associated cost of orphanages, among other things, and emphasizes that such onions are but one of many unsafe and “cunning” (“хитроумный”) methods used to induce miscarriages. He makes a strong impression on the communist representative and leaves the jar in the party office. In the history of the novel, this act directly influences the course of abortion policy in the Soviet Union: Some ten years later, after the death of Stalin, this party official, under the

influence of the hideous womb and Pavel Alekseevich's arguments, plays a vital role in the legalization of abortion. Thus, Pavel Alekseevich, coming from a medical background, engages with the non-scientific aspects of his work on abortion and even affects widespread social change.

The second scene that serves as a climax for Pavel Alekseevich's work on abortion is the death of Liza Polosukhina, who dies as the result of a botched underground abortion. This episode is much more graphic and visceral than Pavel Alekseevich's conversation with the party official; there are Liza's moans, her bloody bedding, and her daughter's casual statement that Liza "lets in a bunch of hound dogs, and then gets herself scraped out" ("она водит к себе кобелей-то, вот и ковыряется"; 473). Here Ulitskaia makes concrete and personal the issues that arise from the ban on abortions. Her (decidedly medical) description of the cause of Liza's death is even more disturbing than the image of the struggle between onion and fetus:

Inspection showed that Liza the janitor had died from bleeding that began as a result of a perforation of the uterine wall. With an unidentified instrument, the ill-fated power of underground medicine had pulled through this accidental hole half of her intestines...

Экспертиза показала, что Лиза-дворничиха умерла от кровотечения, начавшегося в результате перфорации стенки матки, и злостная подпольная медицинская сила вытащила через это нечаянное отверстие неизвестным инструментом половину кишечника... (476)

We see in this passage the personal toll of underground abortions, a woman who comes to a grisly end because she lacks access to proper medical care. To the gruesome aftermath of Liza's failed abortion is added the fate of her newly orphaned children, one of whom, Toma, moves in with the Kukotskiis. Moreover, Liza's death serves as a loss of innocence for Tania — Pavel Alekseevich bemoans "the words 'she got herself scraped out' in Tania's mouth..."

(“слово ‘ковырнулась’ в Таниных устах...”; 474) — and as the impetus for the final falling out between Pavel Alekseevich and his wife Elena.

Indeed, Pavel Alekseevich and Elena fight precisely over the ethics of abortion. Pavel Alekseevich defends his liberal views as a pragmatic doctor while Elena recalls the conservative opinions of her Tolstoyan upbringing. In their fight Kukotskii is uncharacteristically cruel, insensitive, and insulting. He tells Elena that she is not entitled to an opinion on the matter because she herself can no longer give birth. In the heat of their argument, Kukotskii strikes the death blow to their marriage with these words: “You don’t have a say here. You don’t have that organ. You are not a woman. Seeing as how you can’t become pregnant, don’t you dare judge” (“У тебя нет права голоса. У тебя нет этого органа. Ты не женщина. Раз ты не можешь забеременеть, не смеешь судить”; 479). It is significant that Pavel Alekseevich himself removed “that organ” when Elena first came to his operating table with an infection; indeed, that is, strangely enough, how they meet. The sad fact is that Kukotskii, who works so much for women in general, coldly cuts down the only woman he has ever loved, the only woman he has ever been able to love. In the end, Pavel Alekseevich sacrifices his own marriage for his commitment to the abortion question: After this fight, Pavel Alekseevich and Elena remain married, but they live together more as strangers than as husband and wife.

Il’ia Iosifovich and Genetics

Another prominent example of a socially engaged scientist is Pavel Alekseevich’s friend from university, the geneticist and “Jewish Don Quixote” (“еврейский Дон Кихот”; 457) Il’ia Iosifovich Gol’dberg. Il’ia Iosifovich is as sharp and quick-witted as he is short-tempered, and he cannot seem to stay out of labor camps. Ulitksaia summarizes his

relationship to his work with these words: “Science, by his deep conviction, was destined to save the world” (“Наука, по его глубокому убеждению, была призвана спасти мир”; 462). Accordingly, he speculates abstractly, and his ideas about the future of science border on the religious: “His thoughts took flight and soared to a high-pitched squeal, and he prophesized a complete reworking of the world with the help of well-placed genetics” (“Полет его мысли был высок до писка, и он пророчил полную переделку мира с помощью хорошо поставленной генетики”; 462-63). Unlike Pavel Alekseevich, he cannot satisfy himself with “small” projects such as formulating public policy on abortion. Where Kukotskii focuses intently on a specific medical problem, namely the science behind conception, pregnancy, and childbirth, Gol’dberg bounces around, seeking underlying principles that will revolutionize all of genetics and, with it, Soviet society. It is important to note here that Pavel Alekseevich, as a doctor, studies practical medicine, whereas Gol’dberg is a pure theoretician and research scientist. In his commitment to public medicine and civic engagement, Pavel Alekseevich is heir to a tradition of nineteenth century Russian medicine that Loren Graham characterizes as one of “great practitioners and community benefactors”; in particular, Pavel Alekseevich may be attached to the zemstvo doctors, local practitioners who primarily focused on preventive medicine and were, on the whole, “self-sacrificing and idealistic servitors of the public good.”⁹ If Pavel Alekseevich takes after the zemstvo doctors as a practical and engaged physician, then Gol’dberg follows the path of the Russian theoretician, a figure with no less deep roots in Russia. As Ulitskaia herself remarks, “it is well known — Russians have always performed well in those areas of science where everything can be done in one’s mind, on one’s fingers, without serious financing”

⁹ Graham, 244, 247.

(“известное дело — русские всегда хорошо шли в тех областях науки, где все можно сделать в уме, на пальцах, без серьезного финансирования”; 706).

For much of the novel, Gol'dberg's great fascination — obsession, really — is the science of the Soviet population¹⁰. To his mind, biological and sociological factors exert a mutual influence on one another. On the one hand, he believes that scientists must steer the course of history for the better. It is his conviction that geneticists will one day be able to engineer a world of geniuses by isolating the genes that give rise to talented mathematicians, musicians, artists, and others. With misty eyes (and, probably, an empty bottle of vodka on the table) Gol'dberg describes this world for Pavel Alekseevich: “The future belongs to us, belongs to the scientists. There is no other power that can save the world!” (“Будущее за нами, за учеными. Другой силы, которая могла бы спасти мир, не существует!”; 463). On the other hand, he sees that political realities such as war and persecution affect who reproduces and how often, and this leads him to his great insight, that “it is necessary to view the political factor as the most important component of the evolutionary process” (“политический фактор необходимо рассматривать как важнейший компонент эволюционного процесса”; 718). For Gol'dberg, then, science and socio-political concerns are intimately intertwined, and he devotes all his energy to exploring their intersections.

¹⁰ Interestingly, the Soviet Union had a strong tradition in population genetics before Lysenko: “People outside the Soviet Union who know about Lysenkoism are often surprised to hear that in the 1920s a group of Soviet geneticists were world leaders, making breakthroughs that earned them credit for being among the creators of population genetics” (Graham, 240). Granted, researchers like Sergei Chetverikov analyzed the genes of populations of fruit flies instead of the Soviet people. The concept and term “gene pool,” which interests Gol'dberg so greatly, originates from the Russian “генофонд” (Graham, 242).

Like Kukotskii, Gol'dberg studies the effects of Soviet politics on demographics and worries about the path of his country; in spite of his gulag stints he is a devoted patriot. He casts a wider metaphorical net than Pavel Alekseevich does, however. Instead of narrowing in on a concrete issue and seeking reforms like Kukotskii, he draws broad connections and shouts his conclusions from the rooftops. Specifically, he sees in the short history of the Soviet people an example of “directed evolution” that is headed for trouble: The strong and the healthy have died in the world wars and the revolution, great minds have left for foreign countries, and the honest, dignified, and courageous have gone to death or to camps. The result is a new Soviet people, “a new socio-genetic entity” (“новая социогенетическая единица”; 707) fundamentally different from and fundamentally worse than the pre-revolutionary Russian people. “In general,” Gol'dberg says, “any striking quality made a person noticeable and immediately put him at risk” (“Вообще, любое яркое качество делало человека заметным и сразу ставило его под удар”; 709-10) and thus the “Soviet race” is comprised of the detritus of this demographic winnowing process: the unremarkable, the old, the cowardly, the lower half of the bell curve. Importantly for Gol'dberg, this means that the very gene pool of the Soviet Union has been influenced by political conditions. That is, politics directly affect the evolutionary process on a cellular, biological level.

As mentioned earlier, Pavel Alekseevich is a practical scientist, a doctor, while Gol'dberg is a researcher on a more abstract level, and this fact greatly impacts how they approach intricate social questions. As a theoretician, Il'ia Iosifovich generally lacks Pavel Alekseevich's compassionate touch around sensitive issues. Pavel Alekseevich himself struggles with the ethics of abortion; in spite of this, and although he is by no means a perfect character (he sexually assaults his own wife at one point), he by and large strives to

understand and help his patients. In a word, Pavel Alekseevich's views are subtle and human. Gol'dberg, by contrast, is crueler and more detached. In one scene, for instance he gets drunk and quotes Cicero as saying that women who seek abortions deserve to be executed for robbing the state of soldiers. Even more worrying is his proposed solution to society's problems, a "reworking of the world with the help of well-placed genetics," which comes dangerously close to eugenics. Pavel Alekseevich even says as much at one point. There is no small irony in a Jewish scientist of the early twentieth century hypothesizing that the gene for blue eyes is connected to the gene for courage, as Il'ia Iosifovich proposes in one (post-war) conversation with Kukotskii, and Gol'dberg's idea of manipulating the character traits of an unborn child rightfully belongs in a late-night science fiction movie. In line with his obsession with genius, he ranks and judges people by their intelligence; Ulitskaia writes of an intellectual hierarchy established by the Gol'dberg family, in which Il'ia Iosifovich occupies the highest position, followed by the twins, and only then followed by everyone else (735).

A very brief but significant scene in Part Three of the novel involves a woman who is able to disrupt this rigid hierarchy for Il'ia Iosifovich. Sitting once again in a prison camp, Gol'dberg escapes general labor with the help of the camp's lead doctor, who takes him on as a medical assistant. This doctor, an elderly woman, is described as lazy, indifferent, thieving, and generally a poor professional. All the same, in his two years at the camp Il'ia Iosifovich never once challenges her or argues with her (this is the same man who once knocked out a colleague's tooth over a "scientific argument") for the simple reason that he sympathizes with her situation, and perhaps he even respects her stoic dignity — the elderly doctor has a dependent, mentally disabled adult daughter.

Always pasturing nearby was her twenty-year-old imbecile daughter, whom she was afraid to leave home alone. Their biography — bitter, Soviet, and inescapable like an unburied body — trailed in her wake...

При ней постоянно паслась двадцатилетняя дочь-дебилка, которую она боялась оставлять одну дома, и биография — горькая, советская и неизбывная, как непогребенный покойник, шла за ней по следу... (812)

The use of the word “pasturing” (“паслась”) is meaningful in this excerpt. With it Ulitskaia portrays the daughter as simple and dull, bovine even, but peaceful and benign as well.

Gol'dberg, who speaks of a bright future of geniuses and ranks people by their intellect, should have no use for the mentally handicapped girl, yet even he feels compassion for their situation. Ulitskaia later remarks that the camp doctor also sends part of her paycheck to a sister that lives with several children but no husband.

When Il'ia Iosfivich leaves the camp, he is surprised to find that the elderly doctor is braver and smarter than he had imagined. Upon his release, she offers to help Gol'dberg by smuggling him foreign research journals.

She spoke words to Gol'dberg that surprised and even embarrassed him: she turned out to be at once smarter and better than he thought. It may well be that, due to the presence of Il'ia Iosifovich with his old-fashioned generosity of spirit and his droll integrity ... he had raised the doctor to his own level for a brief moment.

Она сказала Гольдбергу слова, его удивившие и даже устыдившие: она оказалась и умней, и лучше, чем он думал. А может быть, дело именно в том и состояло, что от присутствия Ильи Иосифовича с его старорежимным великодушием и смехотворным благородством ... он поднял врачуху на короткий миг на свой уровень. (812)

It is significant that her words do not just surprise Gol'dberg, but embarrass him — they bring him face to face with the shortcomings of his hasty judgments of intellect. Another important point in this passage is the ambiguity in the line “he had raised the doctor to his own level for a brief moment.” The context suggests that his high qualities inspire her ethically, but there is also the connotation that, for an instant, Gol'dberg mentally places her

in the same category as himself, that he views her as an equal. Ulitskaia's treatment of the nameless camp doctor is ultimately understated — the woman and her daughter occupy all of three pages, and neither have any direct lines — but they fundamentally challenge Il'ia Iosifovich's narrow categories, and thus they develop the theme of ethics and morality in relation to science. She is at best a passable doctor, and certainly neither the civically engaged zemstvo heir of Pavel Alekseevich nor the “genius” of Il'ia Iosifovich, but the aging doctor is still an intelligent, strong, and moral character.

Science and Morality

As the scene with the nameless camp doctor indicates, Ulitskaia often ruminates on the question of ethics and science. She considers the issue of morality within science itself, and here again she largely does so through the scientists themselves. Unsurprisingly, an important moment occurs in one of Pavel Alekseevich's frequent debates with Gol'dberg. Replying to Gol'dberg's claim that immoral science is more dangerous than immoral ignorance, Pavel Alekseevich hypothesizes that science itself can never be moral or immoral — only the people who interact with and use science may have a “moral dimension.”

Science is a means of organizing knowledge... I don't believe that science has a moral dimension. Perception does not have a moral shade, only people may be immoral, and not physics or chemistry and still less mathematics...

Наука — это способ организации знания... я не думаю, что и у науки есть нравственное измерение. Познание не имеет нравственного оттенка, только люди могут быть безнравственными, а не физика или химия, и уж тем более математика... (815-16)

This is, of course, a matter that is deeply personal for both of them: Pavel Alekseevich dedicates himself to providing medical care for pregnant and infertile women, while Gol'dberg is ever theorizing in high phrases about how to transform the world with morally directed genetics. Indeed, both Kukotskii and Gol'dberg achieve a degree of morality in their

scientific careers, although in different ways. Pavel Alekseevich, for his part, brings children into the lives of formerly infertile couples, teaches medicine to provincial doctors and midwives, and, by the history of the novel, plays a substantial role in the 1955 legalization of abortion in the USSR. Il'ia Iosifovich, on the other hand, seeks big answers to big social questions and genuinely wants to improve the world, although, as discussed before, his scientific ideas lead him to disregard the individual in favor of the whole.

At times, however, Ulitskaia seems to challenge Pavel Alekseevich's claim that science lacks a moral dimension. In fact, one of the most morally charged scenes in Part One involves Tania's questionable work in a research laboratory. When Tania decides to pursue biology, Pavel Alekseevich calls his old colleague Gansovskii and requests that he accept Tania into his lab. Ulitskaia paints Gansovskii's workshop with dark hues from the very start; indeed, Gansovskii's laboratory is probably the best example of immoral science in the novel. It is noteworthy that this is a research laboratory, that is, more on the theoretical side of biology. Ulitskaia does mention, however, that their ultimate aim is to cure a human disease; it would be too easy, and ultimately inaccurate, to say that Ulitskaia categorically approves of practical science over theoretical, although it is important to keep in mind that this divide exists.

During Tania's first visit to the laboratory, one of the lead researchers, Marlina Sergeevna, demonstrates an experiment on baby rats. Tania looks on as Marlina Sergeevna removes a live rat from a container:

While they were talking, [Marlina Sergeevna] raised a wad of gauze from the dish. In the dish several newborn rats were stirring about, mixed in among decapitated torsos whose heads had already gone as victims to the high and bloodthirsty god of science...

Разговаривая, она приподняла марлевую салфетку с лотка: в нем шевелилось несколько новорожденных крысят, вперемешку с уже обезглавленными туловищами, головки от которых пошли в жертву высокому и кровожадному богу науки... (571)

Tania swallows back her nausea. A moment later, Marlena Sergeevna “coos” to the rats (“— Крыски мои, — заворковала ученая дама”; 571), selects one, and promptly cuts off its head. She asks Tania to try the same. Tania takes the warm rat in one hand, a cold pair of scissors in the other, and presses down, “having gagged her stupid immortal soul with her enlightened, eager-for-science sense of reason” (“зажавши просвещенным, рвущимся к науке разумом глупую бессмертную душу”; 571-72). As Ulitksaia writes, Tania had formally been inducted into the ranks of priestesses “of the “high and bloodthirsty god of science.” In this scene, then, Ulitksaia seems to very directly attribute a moral dimension to science and its practitioners — and a negative one at that.

Following her initial disgust at the sight of decapitated rats, Tania falls in love with the laboratory. She tells Pavel Alekseevich in enthusiastic detail about her work preparing the wombs and brains of rats for experimenting. She shows great talent as well, as she does for most things; about Tania’s preparation of specimens Ulitksaia writes, “only the old woman Vikkers, Gansovskii’s personal assistant, had specimens better than Tania’s, but Vikkers had been doing this and nothing else for fifty years” (“только у старухи Виккерс, личного лаборанта Гансовского, препараты были лучше Таниных. Но Виккерс пятьдесят лет ничем другим не занималась”; 581). However, as Tania becomes absorbed in research and Pavel Alekseevich takes pride in her successes, Ulitksaia all the while underlines the continued presence of the “high and bloodthirsty god of science” in the lab. In one experiment the scientists attempt to obstruct the flow of brain fluids in unborn rats; the operation is considered successful provided that “the rat didn’t miscarry and scarf up its

defective spawn” (“крыса не скинула и не сожрала свое дефектное потомство”; 581), a decidedly dark outcome. Another experiment involves injecting ink into a rat’s bloodstream, and Ulitskaia observes that “this method was most effective in the case when the solution was injected into a living animal” (“наиболее эффективен этот метод был в случае, когда наливку производили на живом животном”; 582). This kills the test subject, of course, as the creature’s heart unknowingly pumps ink through its body and the animal slowly suffocates.

This experiment on rats foreshadows “the decisive turning point of Tania’s fate” (“решительный поворот Таниной судьбы”; 583) that occurs after Tania is promoted and given the keys to a cabinet of laboratory equipment. When a fellow researcher named Raia needs access to Tania’s cabinet to perform this ink experiment, Tania asks what Raia will be experimenting on. In response to Raia’s answer that she will be working on a human fetus, Tania calmly inquires whether the fetus is living or dead, and hands Raia her instruments:

“What¹¹ are you injecting?” asked Tania in a businesslike tone.

“A human fetus,” answered Raia.

Tania ... asked casually, “Living, dead?”

“Dead,” calmly responded the lovely Raia.

— Кого наливаешь? — деловито спросила Таня.

— Плод человеческий, — ответила Рая.

Таня... спросила деловито:

— Живой, мертвый?

— Мертвый, — спокойно отозвалась миловидная Рая. (584)

¹¹ Literally “whom” (“кого”).

When Tania realizes the implications of what she has said, she immediately hangs up her lab coat, walks out of the building, and drops out of the Biology department: “Her love-affair with science ended for good at this very moment” (“Роман ее с наукой закончился в этот самый час и навсегда”; 584).

This scene in the laboratory, one of the emotional and moral highpoints of Part One of the novel, leads to an important and revealing discussion between Pavel Alekseevich and his adopted daughter. Tania, deeply disturbed by her absentminded willingness to experiment on a living human fetus, wishes to discuss her experience with her father and with him alone. The two sit for breakfast to discuss the incident and their contrasting views of “professionalism.” Their resulting conversation provides important insight into the connection between morality and science in the novel. Pavel Alekseevich, speaking first, provides a succinct and eloquent summary of his take on the role of a professional.

In our business, Tania, the professional is the one who takes upon himself responsibility and chooses the most acceptable among the possibilities at hand. Sometimes this is a decision of life and death.

В нашем деле, Таня, профессионал тот, кто берет на себя ответственность, выбирает из имеющихся возможностей наиболее приемлемую, иногда это выбор жизни и смерти. (588)

This is an important passage that sheds light on Pavel Alekseevich and his work as a whole. Although he fiercely supports the legality of abortion, Kukotskii himself is conflicted ethically by the question of abortion; as Ultiskaia writes, “he considered the artificial termination of pregnancy to be the most difficult of all gynecological operations in the moral sense, both for the woman and for the doctor...” (“искусственное прерывание беременности он считал самой тяжелой из гинекологических операций в моральном отношении, и для женщины, и для врача...”; 576-77). That is, Pavel Alekseevich is by no

means one of Vasilisa's feared "Jew-wizards" ("евреев-колдунов"; 536) who supposedly take pleasure in killing fetuses: clearly he in fact struggles with the procedure. All the same, his clinic performs abortions. He understands that decisions that are "difficult in the moral sense" still have to be made. That is, he takes a subtle stance with regards to a complex issue and chooses "the most acceptable" resolution to a tough question.

In this same conversation Pavel Alekseevich goes on to make his point concrete for Tania: "In my profession, when one needs to choose between the life of the child and the life of the mother, normally they choose the life of the woman" ("В моей профессии, когда надо выбирать между жизнью ребенка и жизнью матери, обычно выбирают жизнь женщины"; 588-89). The point here is not that he does not value the life of children. On the contrary, he is famous for the skill with which he brings newborns into the world, and Tania in one scene likens the way he holds her baby to the way a musician holds his instrument, with tenderness and bravado (нежность и дерзость; 794). Rather, when presented with the difficult decision between the woman and her child, he is prepared to choose the woman. There are echoes of this in his fight with Elena: When Elena says that it is wrong to "murder" ("убивать") unborn children, Pavel Alekseevich screams back that she must think of the women even if they are criminals, as Elena describes them (479). Kukotskii may assign a moral shade to the practice of abortion — he finds the procedure "difficult in the moral sense" — but, what is more, he informs his judgments by the larger contexts surrounding the matter at hand. His views with regards to experimenting on rats are similarly supple. There is, of course, no reason to believe he enjoys killing small animals, yet he claims that killing a hundred thousand rats, "as many animals as you please, no questions" ("сколько угодно животных, вопросов нет"; 589), is justified if it saves but one human life.

Pavel Alekseevich, then, takes complex stances in his scientific work and seeks — and achieves, I would argue — a high degree of morality in his professionalism. Most of the characters of *Kazus Kukotskogo*, however, are not like Pavel Alekseevich, and among the scientists there are plenty of bad eggs. We have already seen, for example, how Il'ia Iosifovich's convictions about genetics lead him to questionable places. Gol'dberg is an essentially ethical character, however, and he redeems himself later in life; his ideas simply cast him astray. A better example of a bad scientist is Professor Gansovskii, who is both less passionate and much more actively immoral than either Kukotskii or Gol'dberg. Gansovskii, who runs the research laboratory where Tania works, is described as a short man who resembles an old boxer (both in the sense of the dog and a fighter) (567), and those around him debate whether or not he colors his eyebrows. What is certain about him, though, is that he abuses his position to prey on his female lab assistants. At first Ulitskaia only hints in this direction, writing that “the old professor Gansovskii's relations with his female employees were well developed,” (“у старого профессора Гансовского отношения с его сотрудницами были богатыми”; 567). Later in this same paragraph she is a bit more direct with the line that, with only four exceptions in the entire laboratory, “all the female employees ... passed through his powerful, disproportionately long hands” (“все сотрудницы ... прошли через его мощные, непропорционально длинные руки”; 567). We further find out that he has married at least two of his assistants and raised a son with another.

Gansovskii's affairs alone are damning, but perhaps not completely so; Ulitskaia notes, perhaps ironically, that “it must be said that none [of his partners] were left dissatisfied” (“недовольных, надо признаться, не было”; 567). But even if his

relationships are nominally consensual, they are certainly predicated on the problematic power dynamic between a male boss and his much younger female subordinates. Any doubt regarding his innocence is erased at the beginning of Part Three when he attempts to rape Tania in his office. He clearly knows what he is doing when he forces Tania to sit on an uncomfortable ladder in the corner of the room and approaches her calmly, only gradually advancing on her; we can infer that he has done this before. Tania escapes from him, and when she does Ulitskaia makes it clear that, for Tania at least, Gansovskii's actions are directly tied to the kind of "dirty science" that she has already begun to reject: "Tania shot out of the institute like a bat out of hell and dashed away from the temple of science, where everything was filth, dirt, scum... ("Таня вылетела пробкой из института и понеслась прочь от храма науки, в котором все было мерзость, грязь, мразь..."; 693).

The theme of "dirty science" runs deep in this scene. Gansovskii practically hypnotizes Tania into accepting his advances, and he does so by speaking about her dissertation. He talks of capillaries and auxin ("ауксин") as he corners her, touches her, and, ultimately, pushes a hand up her thigh while pleasuring himself. The image is potent: He talks over a scientific question while positioning himself to rape a girl fifty years his junior. All the while he maintains a level and formal tone, simultaneously discussing the possibility that Tania may soon publish her first article and preparing to assault her. It is in fact this contrast that paralyzes Tania; she is in shock not just from what he is doing but from the discrepancy between his demeanor and his speech on the one hand and his actions on the other. He approaches her, then, not simply as a dirty old man, but as her scientific adviser as well. Gansovskii and his kind lead Tania to throw out science entirely — she joins instead a

bohemian crowd that refuses entry to any person of “traditional learning,” whether they study Chinese grammar, medicine, or physics (724).

Another instance of a bad scientist is Toma Polosukhina, the daughter of Liza the janitor, who moves in with the Kukotskii family after her mother’s death. Though described as unintelligent — Tania thinks of her as “something like a talking dog she has to care for” (“что-то вроде говорящей собачки, о которой надо заботиться”; 500) — Toma ends up studying at the university and specializing in botany. Pavel Alekseevich dismisses her subject — her glorified gardening lacks the moral consequence of Kukotskii’s or Gol’dberg’s work, to be sure — but Toma truly engrosses herself in her plants. Even if she is passionate about her botany, though, Toma does not prove to be the brightest scientist: In Part Four of the novel, some twenty years after her entrance to university, she is still writing her dissertation. What is more, like Gansovskii, Toma manipulates her position as a scientist to her advantage, although, to be fair, her crimes do not reach sexual harassment. Rather, Toma uses her modest scientific achievement to fuel her vanity and ignorance.

Toma comes from a poor background, and she is afraid to lose the privileges she has found as an adopted member of the wealthy Kukotskii family. As a result, she is often cruel, petty, and small-minded. After just one year of living with the Kukotskiis, she spends a summer with her brothers in a rural village. There her brothers live a simple, rugged, and poor lifestyle, and Toma is entirely unable to understand them or, at the very least, commiserate with them. Ulitskaia portrays the brothers as rude muzhiks who fight and cuss, and “in Toma they elicited neither sympathy nor pity, not to speak of love” (“в Томе они не вызвали ни сочувствия, ни жалости. А уж о любви речи быть не могло”; 556). Toma expresses little compassion, either. At one point she scolds Vasilisa for not hauling water,

and this after Vasilisa has gone completely blind (742). Later, when she is responsible for the frail and aging Elena, Toma neglects the poor, dementia-addled old woman and leaves Elena to walk in ragged slippers while she herself has “three new pairs, no less” (“три пары новых, не меньше”; 855). She even throws away gifts that Zhenia, Elena’s granddaughter, brings, saying that Elena no longer has any need for possessions. Toma’s vanity shows itself when she earnestly believes that Pavel Alekseevich loves her more than he loves Tania; when the two were children, Kukotskii would bring Toma more gifts because he had pity for her (828). Furthermore, Toma’s studies fuel her small-minded worldview and flame her arrogance:

[Toma was] proud of her past, present, and future, to which she made slow and sure steps. She was writing a dissertation about viral disorders of her evergreens... and she felt herself the spiritual heir of her renowned mentor, Pavel Alekseevich Kukotskii. Perhaps, this was in fact the case...

[Тому] гордую за свое прошлое, настоящее и будущее, к которому она делала медленные и уверенные шаги. Она писала кандидатскую диссертацию о вирусных заболеваниях своих вечнозеленых... и чувствовала себя духовной наследницей своего знаменитого воспитателя, Павла Алексеевича Кукоцкого. Возможно, так оно и было... (854)

Her work as a scientist enables her feelings of superiority and the vain belief that she inherits the legacy of Pavel Alekseevich, even though there is little reason to believe that her scientific work is exceptional (or even mediocre) and though her work lacks the moral and social dimensions of Kukotskii’s medicine. It is also worth noting that Toma serves as a crude caricature of an empty-headed Soviet patriot; as a child she weeps more at Stalin’s passing than at the death of her own mother (539) and as an adult she refuses to buy anything foreign, be it soap, medicine, or clothing¹² (854).

¹² In spite of her negative characteristics, Toma has sympathetic qualities. As a small child she witnesses her mother’s grotesque death, after all. When Zhenia visits Elena and we see

Finally, one of the most interesting scenes on the topic of morality and science occurs close to the end of Part Two: One of Russia's greatest ethical thinkers sits down with Pavel Alekseevich to discuss the science of love. Although he appears only infrequently in *Kazus Kukotskogo*, Tolstoy, whom Ulitskaia has referred to as "my writer" ("мой писатель")¹³ casts a long shadow in the novel. Elena was raised in a Tolstoyan commune, and she returns to Tolstoy throughout her life; he is, for instance, the only author she enjoys reading when her mind starts to go (715). In her diary Elena recalls of her schooling that "we were taught to read by the alphabet of Leo Tolstoy. And our first books, of course, were Tolstoy" ("читать нас учили по азбуке Льва Толстого. И первые книжки, конечно, толстовские"; 509), books that taught her not to lie and to respect her parents. Tolstoy's thought influences her: When Pavel Alekseevich and Elena fight over the question of abortion, Pavel Alekseevich laughs at Elena's rigidly conservative notions, mocking her with the words "well of course, there you go again with Tolstoyism, vegetarianism, and abstinence..." ("ну конечно, пошло толстовство, вегетарианство и трезвость..."; 478), and it is precisely on account of the Tolstoyism remark that she takes offense. Furthermore, the figure of Tolstoy is bound to loom large over a long Russian family novel that addresses questions of reproduction and sex, as *Kazus Kukotskogo* does — Pavel Alekseevich lives most of his life as a sexual ascetic, while Tania takes part in the promiscuity of the 1960s. It is clearly a big

how Tom and her husband mistreat Elena, all the same Elena says, seemingly out of nowhere, " 'Don't be mad at Tomochka. She's an orphan' " ("На Томочку не сердись. Она сирота"; 857). And even if Toma herself does not see it, part of her fascination with botany emerges from a feeling of "mutual sympathy with plants and of equality in insignificance" ("взаимной симпатии с растениями и равенства в незначительности"; 565).

¹³ Ulitskaia, Liudmila. Interview by Dmitrii Gordon. *Bul'var Gordona*. 13 May 2014. Available at http://www.bulvar.com.ua/arch/2014/19/537414e160780/view_print/ (Last accessed on 20 April 2015).

moment, then, when Pavel Alekseevich personally meets with Tolstoy in what is presumably the afterlife.

In the world of the novel, Tolstoy lives on after his death and proceeds to reject the writings of his lifetime. In his second life he shifts his focus to natural science. In particular, he buries himself in the study of the science of love “on its cellular, as it were, chemical level” (“на ее клеточном, так сказать, химическом уровне”; 674). He summarizes his findings for Kukotskii: “Love materializes on the cellular level — this is the essence of my discovery. All laws are concentrated in love — the law of conservation of energy and the law of conservation of mass. All of chemistry, physics, and mathematics” (“Любовь осуществляется на клеточном уровне — вот суть моего открытия. В ней все законы сосредоточены — и закон сохранения энергии, и закон сохранения материи. И химия, и физика, и математика”; 675). He draws two additional conclusions: first, true love is a rejection of the self for the object of love; and second, “humans are allowed carnal love!” (“плотская любовь разрешена человекам!”; 674). Tolstoy’s discoveries are far afield from normal considerations of the laws of conservation of mass or energy: He is using scientific methods to draw philosophical conclusions about how to live, and conclusions that differ markedly from those he is famous for!

It must be said that Ulitskaia injects a light (or maybe not so light) irony into this scene with Tolstoy. First of all, she mocks his education in science — and perhaps, by extension, his scientific insights as well. Tolstoy himself says that he did not study natural sciences in his youth and instead received a “home education” (“домашнее образование”). Later, when he is unable to recall the name of a scientific law, Pavel Alekseevich laughs to himself: “He didn’t study at the gymnasium... The Yasnaya Polyana education, that’s what it

is... Apparently textbooks from sixth grade of middle school have made a big impression on him” (“В гимназии не учился... Яснополянское образование, вот оно что... Похоже, на него произвели большое впечатление учебники шестого класса средней школы”; 674). His remarks about the love that guides oxygen and metal to react now appear suspect. And besides his scientific knowledge, Ulitskaia portrays Tolstoy as somewhat vain. At the end of their meeting, Pavel Alekseevich assures Tolstoy that not all of his writings of his lifetime are without worth. To Pavel Alekseevich’s mind, Tolstoy’s command of language qualifies him as an expert on love, and in fact Tolstoy’s short story “Alyosha the Pot” (“Алеша Горшок”) is the best he ever read on love. Tolstoy reacts warmly to this and runs off to reread his work; Ulitskaia writes that he “was little interested now in [Pavel Alekseevich’s] opinion... Like all old people, his own personal opinion was most important of all to him...” (“мало интересовался теперь [Павла Алексеевича] мнением... Как и всем старикам, собственное мнение ему было важнее чьего то ни было...”; 676). Ulitskaia’s Tolstoy, then, is an enormous talent with misguided, if intriguing, ideas — not unlike Gol’dberg, for that matter. Perhaps Tania best summarizes Ulitskaia’s treatment of Tolstoy:

I don’t love him. No, that’s not it. First he writes that he doesn’t believe in the music of Bach, or the love of women, or the beauty of mountains, and you’re ready to agree with him. And then — oh! — he suddenly writes three sentences about the beauty of mountains that just dance before your eyes...

Я не люблю его. Нет, не так. Вот он пишет, что не верит в музыку Баха в любовь женщин, в красоту гор, и ты с ним готов согласиться. А он — раз! — напишет вдруг три предложения о красоте гор так, что бьет тебе по глазам... (774)

Whether or not Ulitskaia takes Tolstoy’s ideas about love seriously, there is clear respect for him as a writer, and the scene with him and Pavel Alekseevich is significant in the context of morality and science.

Identity and Rethinking the Biological Family

Another key aspect of science, specifically biology, for Ulitskaia is the way that scientific factors influence human nature and human relations. We first see hints of this theme in the second chapter of Part One when Ulitskaia mentions the “strength” of Kukotskii blood — masculine physical traits seem to persist in the Kukotskii bloodline, regardless of female influence:

Admixtures of other families’ blood hardly changed the profile of strong men with high cheekbones who bald early. The engraved portrait of Avdei Fedorovich ... attests to the strength of this blood, which carries family traits across time.

Примеси чужой крови мало меняли родовой облик крупных, скуластых, рано лысеющих мужчин. Гравюрный портрет Авдея Федоровича ... свидетельствует о силе этой крови, проводящей вдоль времени семейные черты. (420-21)

There is an immediate irony here, namely that Pavel Alekseevich himself never has his own biological child. Indeed, this is one of the great contradictions in Pavel Alekseevich’s life: He is a renowned gynecologist who brings thousands of children into the world, but he never fathers his own child¹⁴. This touches on the innate strangeness of Pavel Alekseevich’s family. The peculiarities in the Kukotskii household are numerous: Pavel Alekseevich and Elena meet on Pavel Alekseevich’s operating table and unwittingly marry while Elena’s husband is still alive; later, Pavel Alekseevich and Elena live together rather as roommates than as husband and wife; Kukotskii and Tania grow closer than Elena and Tania although they share no blood; and two non-relatives, Vasilisa and Toma, attach themselves to the Kukotskii family. The important ties for the Kukotskii family are clearly not only biological, and

¹⁴ A second notable contradiction in Pavel Alekseevich’s life involves Vasilisa, who, for some thirty years, endures a prolapsed uterus that hangs down between her legs — all while living in the “house of the leading gynecologist in the country” (“в доме у первого в стране гинеколога”; 826), who never learns of her condition.

Ulitskaia, by and large, rejects purely biological factors as a deciding influence on personal identity and relationships.

One of the clearest examples of this is the relationship between Pavel Alekseevich and his adopted daughter Tania. The two have a strong bond; their lack of a tie by blood does not affect in the slightest their loving rapport. Pavel Alekseevich, normally a reserved and serious man, allows himself to be openly affectionate with Tania, and he even gives in to baby talk when she is little (433). Kukotskii cannot even fathom the need for a genetic heir now that he has Tania:

No, no, even if Elena were still able to give birth, he was not at all certain that he would even want to put his love for Tanechka to the test or to comparison. He told Elena as much: I cannot imagine a different child, our little girl is a real miracle.

Нет-нет, даже если бы Елена и могла еще рожать, он совсем не уверен, что хотел бы подвергнуть свою любовь к Танечке испытанию или сравнению. Он и Елене об этом говорил: другого ребенка я и вообразить себе не могу, девочка наша настоящее чудо. (433)

Pavel Alekseevich and Tania actually become closer than Elena and Tania. What is more, Tania, in a strange way, even resembles Pavel Alekseevich more than she does her father by birth. In her diary, Elena writes the following for Tania about Anton Flotov, Elena's first husband and Tania's biological father who supposedly died on the front in World War II:

I don't see anything in you from Anton or from his breed. You really look like PA. Your forehead, and mouth, and hands. Not to speak of your gestures, facial expressions, body language, and habits.

Ничего не вижу в тебе ни от Антона, ни от его породы. Ты действительно похожа на ПА. И лоб, и рот, и руки. А про жесты и выражение лица, мимику, повадки — и говорить нечего. (517)

Pavel Alekseevich influences Tania deeply, then, and even on the level of physical appearance.

Midway through Part Three, we find out that Anton Flotov did not actually die in the war; instead, he somehow lands in Buenos Aires and lives there until his death in the 1960s. Pavel Alekseevich learns about Flotov's passing in Argentina when a letter comes seeking heirs, and Kukotskii worries about how to tell Tania that he is not her biological father.

Tania's response to the revelation about her paternity is touching:

Папочка, what meaning could this possibly have? ... Who is this Flotov... You've lost your mind... You are my realest, my favorite elephant, папка, old fool... You and I are terribly alike, you are the best in me... So, what, he only remembered me after his death. And earlier?

Папочка, да какое же это имеет значение? ... Какой еще Флотов... Ты с ума сошел... Ты мой самый настоящий, самый любимый слон, папка, дурак старый... Мы с тобой похожи ужасно, ты мое самое во мне лучшее... Он что, только после смерти обо мне вспомнил? А раньше? (760-61)

Tania throws away the letter and never again thinks about Flotov or her inheritance. Clearly, biological ties mean little for Tania and her adopted father¹⁵.

Tania's relationship with the Gol'dberg brothers is also important as an example of a strange family with dubious biological ties. All their lives Vitalii and Gennadii Gol'dberg compete for Tania. In the end, they both win, albeit in an unexpected way: Tania decides "to choose" both brothers. Explaining herself to Gennadii, Tania says, "I don't see any difference. Now I want you, now I want Vital'ka... And in general I really love your father as well" ("Я не вижу никакой разницы. Мне что ты, что Виталька... Вообще-то я отца вашего тоже очень люблю"; 748). When Tania becomes pregnant, it is unclear which of the Gol'dberg twins is the father and which the uncle — and it seems to make little difference

¹⁵ Another example that attests to Pavel Alekseevich's lack of concern for strictly biological ties is his relationship with his mother. The two have little in common, and their relationship ends for good when Kukotskii is only twenty one years old. Furthermore, Pavel Alekseevich has a half-brother through his mother's second marriage; this brother is mentioned once and then disappears completely from the novel.

(they are identical twins, after all). Tania chooses, somewhat arbitrarily, to marry Vitalii, but she names their marriage a “three-way union” (“тройственный союз”) and her child a “half-nephew” (“полуплемянник”) of Vitalii rather than a son. The family dynamics become even messier when Tania takes a lover, the saxophone player Sergei, who becomes more of a father to the child Zhenia than either of the Gol’dberg brothers. Sergei “adopts” the young Zhenia as his own, which Ulitskaia explicitly compares to the way that Pavel Alekseevich once adopted Tania, and most of Sergei’s friends simply assume that Zhenia is his child (818); this is perhaps made even more bizarre by Pavel Alekseevich’s observation that Zhenia takes after the Gol’dbergs rather than after Tania (794). This is an undeniably strange family, one where biological connections are rendered murky and perhaps even irrelevant.

Ulitskaia further complicates the importance of biological influences in the image of newborn children, a complex and multifaceted symbol in the novel. On the one hand, several scenes find Pavel Alekseevich meditating on the strict, deterministic laws of development that govern the growth of small children. He is intrigued by the presence in his home of Tania and Toma, two wildly different young girls, and he speculates that both biological and environmental factors affect a child’s growth. As a doctor, he is well aware that children, like fetuses, develop according to a rigid biological schedule; this alone, however, cannot explain the divergence he observes between Tania and Toma, let alone the divergence between a simple muzhik and one of Gol’dberg’s beloved geniuses. The cause of their differences, he reasons, lies in early environmental influences, and to this effect he theorizes how best to raise a child:

Give a child music when the desire to dance arises in him, a pencil when he wants to draw, a book when he has matured for this method of receiving information... And what a tragedy it is when a new faculty, a new desire has matured from within, and

time is wasted, the world does not step forward to meet their desires. Then a braking occurs, progress freezes...

Дайте ребенку музыку, когда в нем появляется потребность танцевать, карандаш, когда ему хочется рисовать, книгу — когда он созрел для этого способа получения информации... И так трагично, когда новое умение, новая потребность созрела изнутри, а время упущено, мир не выходит навстречу этим потребностям. И тогда происходит торможение, полная блокировка... (555)

Importantly, it is in these terms that Pavel Alekseevich explains Toma's dullness in comparison with Tania's brilliance: It is not that Toma is of a lesser stock or somehow worse genetically, as Gol'dberg might claim, but rather she was neglected as a child and did not see her first book until school. It should be said, however, that there is at least one indication that Toma's genetic heritage affects her in a Gol'dbergian way — Ulitskaia suggests that Toma's love for botany is based in her "peasant blood," which calls her to the garden. "Peasant blood," Ulitskaia remarks, "all the same piped up in her: that which she did not want to do for banal beets and carrots she did with tenderness and passion for rhododendrons and choisyas" ("Крестьянская кровь все-таки заговорила в ней: то, чего она не хотела делать для пошлой свеклы или моркови, делала с нежностью и страстью для рододендронов и шуазий"; 742). Toma, in general, is something of a living battleground for the views of Il'ia Iosifovich and Pavel Alekseevich: Is her dull, uninspired nature a product of her genetics or her poor childhood environment? Ulitskaia, characteristically, does not take a definitive stance.

Pavel Alekseevich recognizes the influence of deterministic processes in the development of children, yet all the same, newborns are, to his mind, a sort of blank slate of endless possibilities. Pavel Alekseevich fundamentally believes in the importance of nurture over nature, a belief in which he has a vested interest, incidentally: his beloved and talented daughter, after all, is not his own. To this, Kukotskii wonders at the potential variety of each

child, which he considers a refutation of Gol'dberg's mechanistic, genetic explanation of genius:

A serious objection ... lies in children. In newborn children. Each of them is wonderful and unknowable, like a sealed book. ... Every infant contains within himself enormous potential, he is a representative of the entire human race. In the end, Gol'dberg himself wrote a whole book about genius and he could note that a genius, a rarity and a miracle, could be born to a fisherman, a watchmaker, even to a dishwasher...

Серьезное возражение заключается ... в детях. В новорожденных детях. Каждый из них прекрасен и непостижим, как запечатанная книга. ... Каждый младенец содержит в себе весь огромный потенциал, он представитель всего рода человеческого. В конце концов, сам же Гольдберг целую книгу написал о гениальности и мог бы заметить, что гений, редкость и чудо, может родиться у рыбака, часовщика, хоть у посудомойки... (710-11)

Clearly biological factors influence a person's identity, but, Pavel Alekseevich reasons, they are not the only or even terrifically significant factors. The significance he attributes to newborn children can be found in one of the visions that comes over Elena, who is sensitive to mystical experiences, especially in her dementia. In her mind's eye Elena sees everyone, Kukotskiis and Gol'dbergs, Toma's family and others, gathered together on an impossibly small balcony. In the center of this picture is Pavel Alekseevich and a young couple.

This couple is in the very center of this improbable geometric composition, and Pavel Alekseevich takes the infant in his hands and turns his face to Elena... And in this infant comes together all the joy of the world, and light, and meaning. As if in the middle of the sunny day yet another sun rose... This infant belongs to all of them, and they belong to him.

Эта пара в самом центре этой геометрической недостоверной композиции, и Павел Алексеевич берет младенца в руки и поворачивает его к Елене лицом... И в этом младенце сходится вся радость мира, и свет, и смысл. Как будто посреди солнечного дня взошло еще одно солнце... младенец этот принадлежит им всем, а они — ему. (860)

Elena is reduced to tears by this sight. Here we see the newborn child as an image of hope, as a beautiful second sun that does not belong to a single family — the couple is unidentified, and the woman simultaneously resembles Tania, Zhenia, and Toma — but to the community

as a whole. Ulitskaia, then, simultaneously underscores the beauty of a newborn child while testing the limits of the family.

The children whom Pavel Alekseevich's refers to as "Abraham's babies" ("Авраамовы детки") are another notable example of newborns that challenge the importance of biological processes alone. These "Abraham's babies" are children that Pavel Alekseevich brings into the lives of previously childless couples — and in an almost mystical way. He does not help those who come to him by prescribing any sort of fertility treatments, but by advising them to pay attention to monthly rhythms and to the cycles of the sun. Ulitskaia describes his worktable, covered with graphics that look more astrological than medical (551). His apparently pseudo-scientific methods are wildly successful, however, suggesting a deficiency in prevailing medical attitudes of Pavel Alekseevich's time, and his "Abraham's babies" lead him to quasi-mystical meditations on the limits of scientific understanding. He wonders if the stars do not influence human life, as Babylonian physicians believed (430), or if perhaps something else beyond the purely scientific guides humanity:

Pavel Alekseevich probably felt, rather than knew, that stars controlled the stars, but there was something that guides human life outside of man himself. Most of all his "Abraham's babies" convinced him of this, those that he himself summoned to existence by his conjecture about the connection of cosmic time and the secret cell, responsible for the creation of offsprings...

Павел Алексеевич скорее чувствовал, чем знал — звезды звездами, но было нечто, руководящее человеческой жизнью вне самого человека. Более всего убеждали его в этом «Авраамовы детки», вызванные к существованию именно его, Павла Алексеевича, догадкой о связи космического времени и сокровенной клетки, ответственной за производство потомства... (701)

In this sense Pavel Alekseevich admits the poverty of a purely scientific worldview, and this leads to the last section of this paper.

Science, Religion and Mysticism

“The borderline between life and death,” Keeling writes, “and the possibility of transition from one state to another is one of the central themes” in *Kazus Kukotsogo*.¹⁶ Keeling proceeds to list places in the novel where Ulitskaia explores liminal states between life and death. For instance, Elena, when we first meet her, is somewhere between living and dead, and, in general, Elena is sensitive to the ambiguous “middle world” (“средний мир”), which she shares with ghosts and strange visions. There is also, of course, the entirety of Part Two of the novel, which details how several familiar characters — with unfamiliar names and character traits, however — trek like the ancient Israelites through a strange desert that is, presumably, the afterlife. Religion also raises its head in the work. On the one hand is the pious, uneducated Vasilisa of Russian Orthodox; on the other is Il’ia Iosifovich, whom we meet as a secular Jewish intellectual and a “great materialist philosopher” and who, by the end of the novel, studies the Torah, teaches himself Hebrew, and contemplates the existence of “universal reason” (“мировой разум”). In short, it is an understatement to say that religion and mysticism interest Ulitskaia in *Kazus Kukotsogo*. Here too Ulitskaia brings science into her treatment of these topics, and she does so in at least two main ways. First, Ulitskaia uses mystical and religious elements in the novel to challenge the merit of a conventionally scientific worldview; and second, to the contrary, Ulitskaia takes scientific phenomena as a basis for borderline religious meditations.

An example of the first is Pavel Alekseevich and his mystical, unexplained “gift,” his ability to see inside the human body. From the very beginning Pavel Alekseevich’s

¹⁶ Keeling, 218.

fascination with the human body has mystical overtones. As a young boy studying anatomical diagrams he is struck by the dead, inanimate appearance of bones, “as if death is always hiding within the human body and is only covered above by living flesh” (“как будто смерть всегда скрывается внутри человеческого тела, только сверху прикрытая живой плотью”; 414). He is practically brought to tears over the construction of the human heart, and his interest in science leads him to grandiose ideas; he wrestles, for instance, with the thought that the whole world is a kind of perpetual-motion machine, moving from the living to the dead and from the dead to the living (415). In spite of these vague notions, though, Pavel Alekseevich is a scientist, and he is possessed of a fundamentally rational, scientific worldview: “The young doctor,” Ulitskaia writes, “was, of course, a materialist, and could not stand mysticism” (“Молодой доктор был, разумеется, материалистом, мистики не терпел”; 419). He and his father laugh at the fashionable spiritualism of Pavel Alekseevich’s mother, whether she is speaking of self-turning tables or making baseless claims about magnetism (419). Pavel Alekseevich’s rationalism is complicated, however, by his gift of “inner sight” (“внутривидение”), which introduces a magical, decidedly non-scientific element into his life. Interestingly, Kukotskii does not question his gift, nor is he concerned with its origin. Ulitskaia writes:

Pavel Alekseevich treated his gift as a living entity separate from himself. He did not worry himself over the mystical nature of this phenomenon, and instead took it as a useful tool in his profession.

К своему дару Павел Алексеевич относился как к живому, отдельному от себя существу. Он не мучился над мистической природой этого явления, принял его как полезное подспорье в профессии (419).

Here Keeling writes that Pavel Alekseevich “cannot possibly embrace his gift of clairvoyance without violating his basic worldview, so he chooses the only attitude that

makes sense to him and doesn't disrupt his life."¹⁷ Namely, Kukotskii simply lives peacefully with his gift and ignores the questions that it raises; after all, scientific explanations fail him here. His gift is clearly very dear to him — he chooses to completely forsake his romantic life when he discovers that female contact weakens his inner sight — so he ignores a not insignificant part of himself in the process.

Another place where scientific explanations fall short is in the world of Part Two. Part Two follows Elena (now under the name “Noven’kaia,” “НОВЕНЬКАЯ”) as she wakes up in the strange, desert-like world of the afterlife and attaches herself to a group of wanderers. Though Noven’kaia does not recognize anyone, it is Il’ia Iosifovich (“The Hebrew”, “Иудей”) who leads her and others through the unknown landscape. Beside The Hebrew is Pavel Alekseevich (“The Shorn One,” “БРИТОГОЛОВЫЙ”), who fills the role of second-in-command. Ulitskaia portrays this world as completely different from our own — the sun never sets, the scenery is always the same, and the very coordinate system is somehow different, not three-dimensional. To this, the medicine in this world is also different, and vaguely mystical. In a surreal scene, the group crosses a chasm to reach their destination, a faraway shore. One of the wanderers, a former murderer named “The Mannequin” (“Манекен”) falls to his death — in whatever sense one may die in the afterlife. At the bottom of the chasm a number of small animal-like creatures surround The Mannequin’s body and summon a doctor to help him. When one of them objects that the body before them is already a corpse, another responds, “well what if it is a corpse? We can revive a corpse too!” (“ну и что, труп! Можно и труп оживить!”; 661). The doctor tells them they must each give blood to reanimate the Mannequin, and giving blood is harmful for the small

¹⁷ Keeling, 211.

creatures. They agree to the process, however, at which point “they surrounded the shattered Mannequin, a white bedsheet appeared out of nowhere, and mystical medicine began to work...” (“и они окружили разбитого Манекена, и откуда-то взялась белая простыня, и заработала таинственная медицина...”; 662). This “mystical medicine,” based out of the selfless giving of the little animal-like creatures, effectively brings the Mannequin back to life — again, in whatever sense we may interpret the phrase “back to life” in the world of the dead. Their medicine, then, is at once powerful, mystical, and completely different from our own.

Furthermore, The Shorn One tries to bring the medical practices of his lifetime into this world. The Hebrew laughs at The Shorn One’s attempts to do so: “You fool! I’ve told you that doctors are nothing but fallen priests. You studied secular medicine your whole life and want to drag it here” (“Дурак! Я говорил тебе, что врачи — падшие жрецы. Ты всю жизнь занимался секулярной медициной и хочешь ее сюда протащить”; 612). The Shorn One’s techniques do work in this world, but his medicine simply lacks the depth or power of this other, “mystical medicine” that can revive the dead. What is more, The Shorn One’s faith in earthly medicine stands in comparison with The Hebrew’s religion and wisdom, and Ulitskaia seems to endorse one view over the other — it is The Hebrew, after all, who leads the group, and it is The Hebrew who seemingly transcends the desert to land in another world. Here again, though, Ulitskaia’s views are not black and white, endorse-or-not-endorse: It should be said that The Shorn One leads the group when The Hebrew leaves and that he too achieves some form of enlightenment at the end of Part Two.

While Ulitskaia underlines the poverty of a conventionally rational, scientific worldview, she also presents the possibility of approaching religious contemplation through

science. This is seen, for instance, in Tolstoy, who claims to find the laws of love in the inner-workings of cells. We also find this in an interesting scene with Vasilisa, who, as an uneducated rural woman, is perhaps the furthest from a scientist of any character in the novel. A rooster pecks out one of Vasilisa's eyes when she is a child, and as an old woman Vasilisa slowly loses her second eye to a cataract. Pavel Alekseevich tries to convince her to undergo an operation that would restore sight in this second eye. To Vasilisa's protestations that it is God's will that she remain blind, Pavel Alekseevich retorts that it is the doctors, who would return her sight if she would let them, who would be carriers of God's will: "God's will is found in the doctor who, summoned precisely to operate on the blind, may perform an operation on her so that she would see the world again" ("Божья воля в том и заключается, чтобы врач, но то и призванный, чтобы оперировать ослепших, произвел над ней операцию и она снова увидела бы свет"; 741). His arguments fall on deaf ears, however, until Vasilisa is shaken by Toma's reproach that she is rejecting the operation to avoid labor. Vasilisa receives the treatment, and is reminded of Jesus returning sight to the blind:

The words of Pavel Alekseevich about God's will, which is carried out by the hands of doctors, reached her heart. ... She was constantly reminded of the evangelical story about the healing of a man born blind, and she associated the swarm of doctors above her numbed eye with the touch of the Savior to the dead eye of that blind young man.

Слова Павла Алексеевича о Божьей воле, которая совершается руками врачей, достигли ее сердца. ... ей постоянно вспоминался евангельский рассказ об исцелении слепорожденного, и врачебное копошение над ее онемевшим глазом она соединяла с прикосновением Спасителя к мертвому глазу того молодого слепца. (742-43)

In a touching way¹⁸, Vasilisa, who holds stern and ascetic views, comes to love herself after her operation, because God himself must love her enough to return her eye through the work

¹⁸ Somewhat touching, at least: Her newfound love and respect for herself is joined by the thought that God must love her more than others. Vasilisa reasons that the Kukotskiis, in spite of their wealth and talents, lead sad lives — Tania lives like a "tramp" ("бродяжка"),

of the doctors: “First he took away her eye, and then he returned it... How else to understand this?” (“Сначала глаз отобрал, а потом вернул... Как еще понимать?”; 744). This scene also, incidentally, attests to the poverty of medicine mentioned above. In Part Two, “the little ones” (“эти, маленькие”; 677) not only return both of Vasilisa’s eyes, but even give her a third one — again earthly medicine pales in comparison.

In Vasilisa’s crude understanding, modern medicine is an act of God. Pavel Alekseevich, who, by his profession and his gift, combines the scientific and the mystical in his very nature, also approaches medicine with an almost religious sense of wonder. He contemplates the role of the stars in human life as Babylonian physicians once did, and he rejects the coldly scientific views of Gol’dberg. When Tania is pregnant, she asks her father to describe the development of her child. Pavel Alekseevich’s description quickly grows reflective and philosophical:

It seems to me that he already possesses a sense of self, that just now a sense of “I” has been born in him. A feeling of separation of himself from the rest of the world. And the rest of the world is you, my joy, because no other world will be known to him before birth. This doesn’t happen with men. Men are never a universe. But a pregnant woman, in the second half of pregnancy, at least, is a closed world for another human being. ... A universe births a universe.

Мне кажется, что он уже обладает самосознанием, именно в эти дни зародилось у него чувство Я. Ощущение отдельности себя от остального мира. А остальной мир — это ты, моя радость. Потому что никакой другой мир ему до рождения не будет ведом. С мужчинами такого не бывает. Мужчина никогда не бывает космосом. А беременная женщина, во второй половине беременности, по крайней мере, представляет собой закрытый космос для другого человеческого существа. ... Космос рождает космос. (764)

This passage captures the essence of Pavel Alekseevich: his passion for medicine and biology, his reverence for the female form as a giver of life, and his sense of practically

Pavel Alekseevich drinks heavily, and Elena loses her mind to dementia (743). God must love her more than them, Vasilisa concludes.

religious wonder at the mystery of life that underlies and gives meaning to his practice of medicine. Pavel Alekseevich's words, it must be said, also contain a dark shade, for here Kukotskii unknowingly foreshadows Tania's death. He says:

The existence of those animals for whom the mother dies immediately after childbirth has always seemed perfectly natural to me. A universe births a universe — what is the waning universe needed for?

Мне всегда казалось совершенно естественным существование таких видов животных, у которых самка погибает немедленно после рождения потомства. Космос рождает космос — на что же нужен ущербный мир? (764)

Tania, for her part, dies not long after birthing Zhenia.

Associated with the image of a “universe birthing a universe” is another one of Pavel Alekseevich's meditations, again focused on his main object of scientific study: the female reproductive organs. After his final fight with Elena, Pavel Alekseevich is awakened to philosophical rumination by the stress of his home life. Unlike Gol'dberg, he refuses to construct a unifying theory and instead writes small notes for himself. His main source of fascination is still, as it had always been, reproduction:

He intently peered into the bottomless orifice of the world. From there came everything that is alive, these were the veritable gates of eternity... Immortality, eternity, freedom — everything was connected to this hole, through which everything had tumbled, including Marx, whom Pavel Alekseevich could never read, and Freud with his brilliant, erroneous theories, and he himself, the old doctor, who brought into this world, with his very hands, hundreds, thousands, an endless stream of wet, howling beings...

[Он] пристально вглядывался в бездонное отверстие мира. Оттуда пришло все, что есть живого, это были подлинные ворота вечности... И бессмертие, и вечность, и свобода — все было связано с этой дырой, в которую все проваливалось, включая и Маркса, которого Павел Алексеевич никогда не мог прочитать, и Фрейда с его гениальными и ложными теориями, и сам он, старый доктор, который принимал и принимал в свои руки сотни, тысячи, нескончаемый поток мокрых орущих существ... (577)

Here again Pavel Alekseevich lifts his scientific work to a religious level — he is not just planting cactuses like Toma, but he is instead using medicine to engage with immortality, eternity, and freedom, to help each new couple that comes to him to give birth to a new universe.

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