

instantiated in the working lives of Gauss and Humboldt as a veritable clash of the methodological Titans.

In terms of this debate, we can imagine Gauss channeling Athanasius and thundering at Humboldt: "What has quadratic reciprocity to do with mucking inductively around in some jungle. Why are you running all over the world when an equation, albeit with a bit of data fitting, will get you the same insight quicker. All those silly 'depth excursions' are such a waste of time." Kehlmann has Gauss summarize his philosophy thusly: *Was sei Wissenschaft denn dann?... Ein Mann allein am Schreibtisch. Ein Blatt Papier vor sich ... Wenn dieser Mann nicht aufgabe, bevor er verstehe. Das sei vielleicht Wissenschaft.*"

In defense of his observational, quantitative methodology (lots and lots of data) Humboldt would of necessity have fired back with ammunition provided by William James: "Experience has a way of boiling over." So we really do need to go to India to see if those tigers really are there. And once we get there, and see those tigers, we need to count them, and weigh them, and measure them, even to observing and recording in quantifiable terms just how brightly those eyes do burn.

A pragmatist take on all this would eschew totalitarianism of any kind, whether epistemological, methodological, ontological or otherwise, caring only about usefulness. When and if it works, let us pretend to believe in the invincibility of that deductive, a priori methodology and thus justify Gauss's *Weltanschauung*. If it gives us results, why not indulge the inductive impulse and run after Humboldt and the bear by obsessively going over mountains to see what we can see.

There is an insinuation running throughout all the internal monologues and conversations that beneath their respective "*radikalen Vermessungsenthusiasmus*", both men harbor more than a little uncertainty about the absoluteness of any knowledge. Accordingly, Kehlmann wisely allows our two titans to achieve some degree of rapprochement and mutual appreciation by intimating that the two respective methodologies are perhaps more or less complimentary and maybe even interdependent.

Gauss must finally admit that "*Humboldts Vermutung traf zu: das Erdfeld fluktuierte, seine Stärke änderte sich periodisch.*" Of course Gauss still had no doubt that he "*maß in kürzeren Intervallen, er maß genauer, und natürlich rechnete er besser.*" Humboldt is allowed to concede that he is coming to appreciate Gauss's method better all the time: "*Er müsse Gauss unbedingt sagen, dass er jetzt besser verstehe.*" Since in imaginative novels everyone is allowed to employ telepathy on a whim, Gauss is allowed to graciously reply: "*Ich weiß, dass Sie verstehen, antwortete Gauss. Sie haben immer verstanden, armer Freund, mehr, als Sie wußten.*"

So it seems that all along we have been nudged by our excessively omniscient narrator(s) toward an interpretation that says both approaches are valid and justifiable and fruitful in their proper context, in a given time and a given place. Kehlmann has Humboldt soliloquize in this vein as he returns to Berlin from his Russian trip and thinks of Gauss at home peering through a telescope toward the heavens: "*...hatte er auf einmal nicht mehr sagen können, wer von ihnen weit herumgekommen war und wer immer zu Hause geblieben.*"

Maybe T. S. Eliot was broaching just such a reconciliation of the deductive and the inductive (and perhaps hinting that, just like Gauss's parallel lines, these ways of grasping the "real" world merged way out there somewhere into the abductive) when he noted: "We shall not cease from exploration, and the end of all our exploring will be to arrive where we started and know the place for the first time."

THE GERMAN SOCIETY OF PENNSYLVANIA

Friday Film Fest Series



Die Vermessung der Welt

By Detlev Buck

January 16th, 2015

• 6:30 PM •

Film, Food & Discussion

Non-Members \$15, Members \$12

The German Society of PA

611 Spring Garden St.

215-627-2332

Support provided in part by the
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Die Vermessung Der Welt (2012)

Director: Detlev Buck

Producer: Detlev Buck, Claus Boje

Screenplay: Detlev Buck, Daniel Kehlmann

Cinematography: Slawomir Idziak

Music: Ennis Rothhoff

Spieldauer: 118 minutes

Cast: Albrecht Schuch (Humboldt), Florian David Fitz (Gauss), Jeremy Kapone (Bonpland), Vicky Krieps (Johanna Gauss), Katherina Thalback (Dorothea Gauss), David Kross (Eugen Gauss), Sunnyi Melles (Mutter Humboldt), Karl Markovics (Lehrer Buttner), Lennart Hansel (Gauss as child), Aaron Denkel (Humboldt as child), Michael Maertens (Herzog von Braunschweig)

Commentary by A. Krumm



Measure for Measure...

The past is pigheaded, stubbornly mired in itself, impervious to suggestions for improvement or correction. And it just keeps getting bigger day by day, resisting measurement. Fortunately for us history and fiction *are* amenable to measurement, since in the beginning and at the end, there is only the text. Armed with this insight, we can confidently attempt to take the measure of Daniel Kehlmann's impishly inventive historical novel of 2005 in which he reimagines the lives and scientific careers of two nineteenth century giants, Carl Gauss (1777 – 1855) and Alexander von Humboldt (1769 – 1859).

In the process Kehlmann makes history hilarious with his audacious fictional forays into the minds and motives of his two subjects while keeping his narrative, in the most charitable sense anyway, within the broad confines of verifiable events. Kehlmann exhibits a decided predilection for dialogical slapstick, putting the two great men up on improbable pedestals and then gleefully knocking them off, whether through absurd conversations or farcical but illuminating scenes.

Yet in the midst of all this fun the intrinsic allure of history continually bubbles up, enticing us to ponder the roots of genius and the *Treibstoff* of intellectual passion as we marvel that two such individuals each actually served a stint here on this earth. There is also an intimation that the luminaries of every generation may grow in our estimate, or simultaneously shrivel in importance, depending on the perspectival lens employed by later generations.

Then came Detlev Buck's 2012 filming of this story, in which he exhibits a decided predilection for filming ladies from a variety of continents and cultures *en déshabillé*. He also employs the same irreverent tone as does Kehlmann and although the film may not be quite as funny as the book it manages to be reasonably laugh inducing and in any case the visuals are much better.

Every teller of tales has tricks and the prevailing trick for both Kehlmann and Buck was to maintain that satirical yet instructive tone while oscillating evenly within the requisite symmetrical narrative structure between the lives, accomplishments and philosophies of these two men. This is no mean feat when you're at the mercy of two hours of film or three hundred large font pages.

There is no formal consensus on how to measure the effectiveness of such an approach to historical storytelling, but the clear verdict of the reading and movie going publics is that Messieurs Kehlmann and Buck pulled it off grandly. Perhaps that is in large part because neither author nor director seems to be soliciting passive consumption. There is an implicit invitation to take this story by the scruff of the neck and think about it and reach some justifiable and responsible interpretation of our own. And while we are awaiting the arrival of that correct interpretation we can chuckle at this story and stand firm in our refusal to lend any credence to the cynics who say all history is fiction anyway.

Gauss and Humboldt were indeed parallel lives, thus readily lending themselves to comparative biographical measurement whether taken chronologically or in terms of their historical impact. Both men experienced the irruption of the French revolution and it's after-shocks, and both men lived to see the miscarriage of the German revolution of 1848. In the interim they each produced a body of work that succeeding generations are still unpacking. They also maintained a correspondence for over forty years.

Humboldt was born to a wealthy upper class family and tutored rigorously (one might almost say ruthlessly) to prepare him for a life of service and great achievement. Nonetheless he had to wait impatiently for his mother to die before he could afford to start checking the world out, but once she did, he commenced his peregrinations with a vengeance. Gauss, the offspring of poor working class parents and a child prodigy whose genius was recognized early on, became a protégé of the Duke of Brunswick, who subsidized Gauss's studies first at the Collegium Carolinum in Braunschweig and then at the University of Göttingen.

There has always been a great enthusiasm for Humboldt in Germany across the entire social-political spectrum. He is a brand name, almost canonical, with Germans looking at him perhaps not dissimilar to the way Americans look at Ben Franklin, the First American. Humboldt epitomizes what Germans want other folks to think of when they think of Germany.

There is something heartwarming, even downright infectious about Humboldt's superhumanly energetic determination to observe, measure and record as much as he could about the physical world we live in and then to spend decades writing his epic summa (*Kosmos*) so everyone could share in his findings. Obviously, he represents an enhanced extract of We the Germans, fortified with increased percentages of energy, discipline and training.

Gauss has not resonated so comfortably in popular imagination. He is not us, not German nor American nor anyone. He is the Solitary Genius and one of the functions of a solitary genius like Gauss is to help us gain a deeper appreciation of the wisdom of humility. He is an enduring reminder that life is not fair. How do you warm up to a guy who wrote his masterpiece (*Disquisitiones Arithmeticae*) when he was twenty-one and then for encores made fundamental advancements in methods of astronomical computation (*Theoria Motus*), made discoveries about non-euclidean geometry, and then, still having time to burn, figured out lots of things about electromagnetism (due in no small part to the urging of Humboldt).

The pleasures of narratology and reader-response aside, if there is a serious point to be taken or an *It* to be gotten from Kehlmann's literary-historical romp, it revolves around a methodological debate the center of gravity of which is a shared conviction of *Messkunst über alles*. Once that conviction has you in its orbit, the dilemma is to decide which method is the best method. What we have here is a nineteenth century rendition of the dialogue,