An Abundance of Katherines
Reviewed by Oaz Nir

For the reader who takes an active interest in the idiosyncrasies of the intellectually gifted, and who is comfortable with the crude language and dismissive humor common to satire, John Green’s An Abundance of Katherines is a pleasantly raucous comic experience, studded with some glimpses of insight. Gifted teenagers are Green’s target audience, and he crafts the book specifically for that population.

It is a standard story. Hard-on-his-luck boy meets girl; he helps her realize she doesn’t need her meaty boyfriend; he gets the girl; along the way, he learns something about life; he also helps her learn something about life; deep conversations occur long into the night, and kissing, too. All along, his Sancho Panza supports him; they have a fight; there is sexual jealousy between them; the sidekick feels taken for granted (because he is); they make up; the friend learns a valuable lesson. There is a road trip involved, although the travelers settle on a location rather quickly, and the new setting serves as a site of transformation for the protagonist. He gains a new perspective on his life, and on mathematics.

It is a tried and true story (but let’s not be too hard here—how many stories have not been told yet?). What makes it worth reading—because it is—the uniqueness of the characters, coupled with Green’s distinctive voice. An Abundance of Katherines may be said to be a study of genius, and of the peculiar social dynamics that shape and color the experience of extremely talented youth.

Colin Singleton, former child prodigy, has just graduated from high school. He is hell-bent on having his own Eureka moment, wherein he would finally think up a truly original thought and stake his immortal claim as a genius. In the meantime, he chews with a nervous energy, brimming with a self-doubt that borders on self-hatred. He gets joy out of little things: He has an encyclopedic brain and is always stating random facts that pop into his mind. He loves to anagram street signs, graffiti, any words he sees—spontaneous anagramming is “his greatest passion”. He seeks to pacify his overwhelming anxiety by having girlfriends; their words of approval—each “I love you”—helps him feel momentarily okay about himself. In fact, Colin has had nineteen girlfriends, all named Katherine.

Our starting point is Colin’s dumping at the callous hands of Katherine XIX. Colin and Hassan Harbish, a crude, lazy, laughable boor and Colin’s only friend, decide to take a summer road trip (Hassan’s Lebanese descent is just too cute, as Colin himself is half-Jewish). Embarking from

Oaz Nir is a doctoral student in health sciences and technology and applied mathematics in a joint program of the Massachusetts Institute of Technology and Harvard Medical School. His email address is oaz@MIT.EDU.
Chicago, they make it as far as Gutshot, Tennes-
see—where they find everything they need: a sum-
mer job, relative anonymity, and a pretty girl for
Colin to fall in love with. The girl is named Lindsey
Lee Wells, which you’ll notice is not the same as
“Katherine”—but not to worry, for Lindsey’s cur-
cent boyfriend is named Colin (to avoid confusion,
Hassan calls him TOC—“The Other Colin”), and so
we see that the name game bodes well for our pair
of star-crossed lovers. There ensues a summer full
of growing pains and betrayal, great laughs and
loves, life lessons—and a mathematical “Theorem
of Underlying Katherine Predictability”.

Green has found the right balance of serious-
ness and humor to make his subject matter appeal-
ing to teens—he places the characters in very real
situations, but treats the situations with a slant of
sarcasm. The lack of seriousness may strike adult
readers as insensitive, but it would be wrong to
criticize the book on this count—Green is writing
to his intended audience, and he does so well.

A central theme is the distinction between prodi-
y and genius. Colin feels a profound dread that
he is nothing more than a washed-up child prodigy,
doomed to a life of base normacy. He yearns to
ascend to the hallowed rank of genius—to make an
indelible mark on society and so secure his place
in the world’s intellectual history. As you
might imagine, Colin is self-centered and self-
deprecating. He doesn’t have friends (well, only
one) and complains about it regularly.

The distinction between prodigy and genius
might strike a little too close to home with some
adult readers. There are many prodigies—children
who have a special talent, who achieve a certain
limited fame—but the number of these prodigi-
es who can focus their talents into a produc-
tive adult career is small. Green suggests that as
they come of age, child prodigies feel an intense
pressure to reach the next step and that in some
cases this pressure can be overwhelming. In some
ways, a more modest record of success as a child
and young adult molds one’s mindset into a
healthier one—with less torment, it may be easier
to achieve.

The notion of being interesting is another cen-
tral theme. Colin yearns at every juncture to be in-
teresting, to say interesting things, to appeal to his
own sense of aesthetics by thinking up interesting
things. He is a bad storyteller because he “always
included extraneous details and tangents that in-
terested only him.” Hassan cajoles him into saying
only interesting things by applying a stock rejoinder (“not interesting, kafir”) whenever Colin’s com-
ments miss the mark. Lindsey’s face is described
as “not pretty so much as interesting-looking”.
Above all, Colin is drawn naturally to devote his
mind to interesting things. In this way, Colin could
have been a mathematician (well, if only he had
a little more natural talent). For mathematicians,
sheer interest is sufficient to study some object.
Curiosity and a (curious sense of) aesthetics has
been a tremendous driving force in the develop-
ment of mathematics. The well-written appendix
by Daniel Biss, assistant professor at the University
of Chicago and associate editor of the Notices,
hints at the connections between these ideas. Biss
does a stand-up job of communicating the basic
concepts underlying the math woven throughout
the novel. It is natural for the reader to wonder to
what extent Biss himself associates with Colin and
to what extent the relationship between Colin and
Hassan approximate that of Green and Biss.

All along, Colin is trying to prove his Theorem,
which is supposed to be his claim to genius. The
Theorem aims to predict which of the two mem-
ers of a romantic relationship will be the one to
break up with the other. It’s fairly morbid, really,
but nevertheless we can understand how a super-
intellectual, over-dumped kid would devote his
brain to a task of this sort. Colin, like all of us,
wants to understand—and control—the events of
his life. In the end, his equation takes this form:

\[-D^2x^8 + D^2x^3 - \frac{x^2}{A^3} - Cx^2 - Px + \frac{1}{A} + 13P
\]
\[+ \frac{\sin(2x)}{2} \left[ 1 + (-1)^{H+1} \frac{\frac{\sqrt{2}}{2}}{\sqrt{|x + \frac{\sqrt{2}}{2}|/H}} \right] \]

It is a cardinal rule in writing reviews not to give
away the ending of the book. Whoops. That Colin
initially thinks that such a formula is possible be-
trays his emotional immaturity. A turning point in
the novel comes when Colin makes his Theorem
fit all past cases (how many anagrams can you
find for “overfitting”?) but also realizes that it
can’t possibly predict all future outcomes. For the
mathematician, Colin’s realization may strike a real
chord. How is it that we move beyond the work
that has already been done in our field and make a
new contribution? And it adds a dimension to our
understanding of young mathematicians—we see
in Colin a transformation to a more mature math-
ematical mind, a transformation that the reader
may remember experiencing for him/herself.

The process of discovery is described with
Gothic, overwrought imagery:

For some reason, as he discarded equa-
tions left and right, the room seemed
to grow warmer. Sweat pooled in the
gauze bandage over his eyes, so he
tore it off. He removed his shirt, wip-
ing still-trickling blood from his face.
Naked from the waist up, his vertebrae
extruded from his skinny back as he
hunched over the desk, working. He felt
as he had never felt before—that he was
close to an original concept.
In my own experience, math research is not quite so intense as this. But then again, I do applied math.

Green crafts the prose itself to entertain twenty-first century teens, and to that end he largely succeeds. The language is a crude vernacular, littered with images of body parts, fluids, sex acts. It’s an attempt to be hip to the voice of today’s youth, and it works. Parents be warned, though, that if you read the book, you may find yourself cringing at some turns-of-phrase, not limited to these gems:

- Shame about how we’re gonna die here, though. I mean, seriously. An Arab and a half-Jew enter a store in Tennessee. It’s the beginning of a joke, and the punch line is “sodomy”.

- To Colin, tampons were a little bit like grizzly bears: he was aware of their existence, but he’d never seen one in the wild, and didn’t really care to.

Teens may well LOL at these, and as an early-twenty-something myself, I have to plead guilty to chuckling at a few of Green’s precious one-liners. At times his writing is crisp and witty, but it remains highly audience-specific. In addition, Green really nails a number of great passages. His vivid descriptions paint colorful, detailed scenes. Teenage readers will delight in the scene where Hassan and Colin first meet Lindsey at the tomb of the Archduke Franz Ferdinand (located in Gutshot, TN) and no less at the Monty Pythonesque boar hunt—a sequence that comes loaded with all the bells and whistles of sex and violence.

And in addition to that passage quoted earlier (a.k.a. “blood, sweat & math”), Green does at another time capture the experience of research with remarkable sharpness: “He kept at the formula, haunted by the feeling that his head was just about to wrap around something big and important” (emphasis added). That sort of drive is something most every mathematician can relate to.

An Abundance of Katherines also explores the role that parents play in the lives of gifted youth. Colin’s father is an unyielding taskmaster, and some of his words to Colin border on the criminal. When Colin announces his intentions to take his road trip, his father responds, “Will you really be happy just driving around aimlessly? That doesn’t seem like you. Frankly, it seems like quitting.” And a moment later, he follows up with, “It pains me to say this, Colin, but if you wish to continue to grow intellectually, you need to work harder right now than you ever have before. Otherwise, you risk wasting your potential.” His father’s pressuring no doubt contributes to Colin’s impossibly high standards for success.

It is worth delving a bit deeper. Indeed, Colin may have been doomed by Nature alone—even though, in practice, he has both Nature and Nurture working against him. Without explicit pressure from his parents, an implicit reward system would likely have arisen by default, where parental praise would motivate Colin to keep achieving (because even parents who are careful to avoid pushing their children will nevertheless provide positive feedback—really, who wouldn’t?). But his father’s unending pushing and less-than-subtle criticism lead Colin’s internal drive to grow to the point of excruciating insatiability.

As a book for young adults, An Abundance of Katherines contains a powerful central lesson. Each of the main characters learns a fundamental truth, which together may be summed up in the maxim: Life is complicated; if you think you’ve figured it out, you haven’t.

By the novel’s end, Colin no longer feels as if he’s wasted his life—he sees the power of re- visioning the past and the promise of the unknowable future: it holds promise precisely because it is unknowable. Colin’s attempts to use mathematics to predict it may have failed, but the failure is fortuitous. He has learned the important lesson that the power of mathematics has its limits, limits that we need not just accept, but actually rejoice in. True, things may not work out with Lindsey; true, he’ll undoubtedly still feel that unyielding drive to excel—to fulfill his potential—and that comes with a tremendous pressure. But now he has undergone a change of mindset that gives us some hope, as companions in his story, that this time may be different, that he may be able to deal with the pressure that comes with greatness, that he may be able to live a productive and happy life.