

Textbooks Unbound

The Promise (and Perils) of the Digital Textbook
Revolution

MCLS Annual Meeting
October 5, 2012

Mark Springer

The Part Where I Tell You What I'm Going to Tell You

- Introduction
- The Paradox
- Textbooks c. 2012
- Promise & Peril





An Elegant Solution to a Zombie Outbreak

Apokalips Web Comic

<http://myapokalips.com>

(c) 2009 by Apokalips Web Comic, <http://myapokalips.com/show/44#comic>





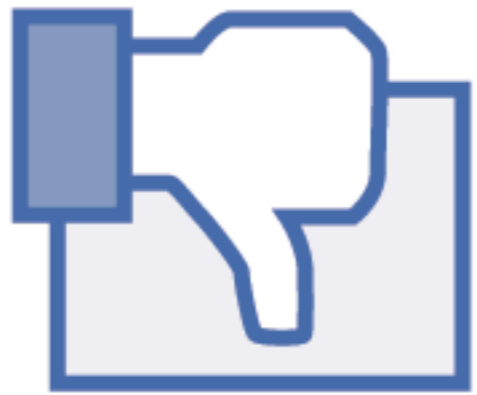


GALE
CENGAGE Learning™

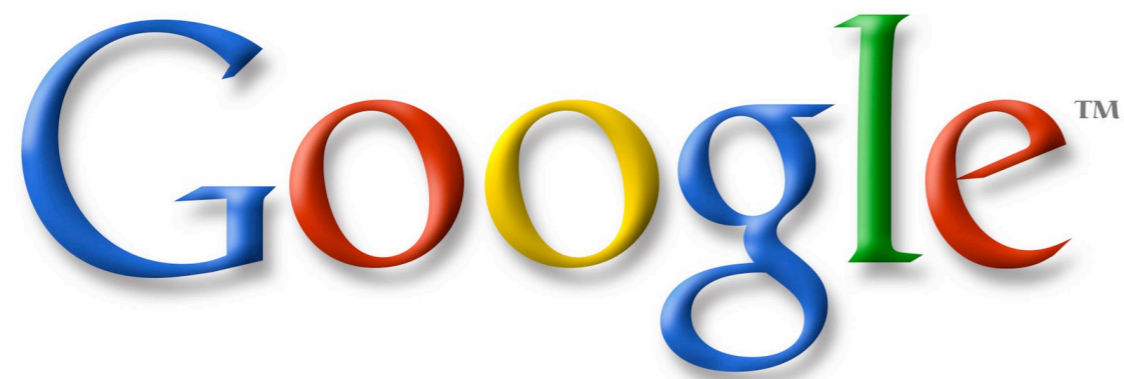


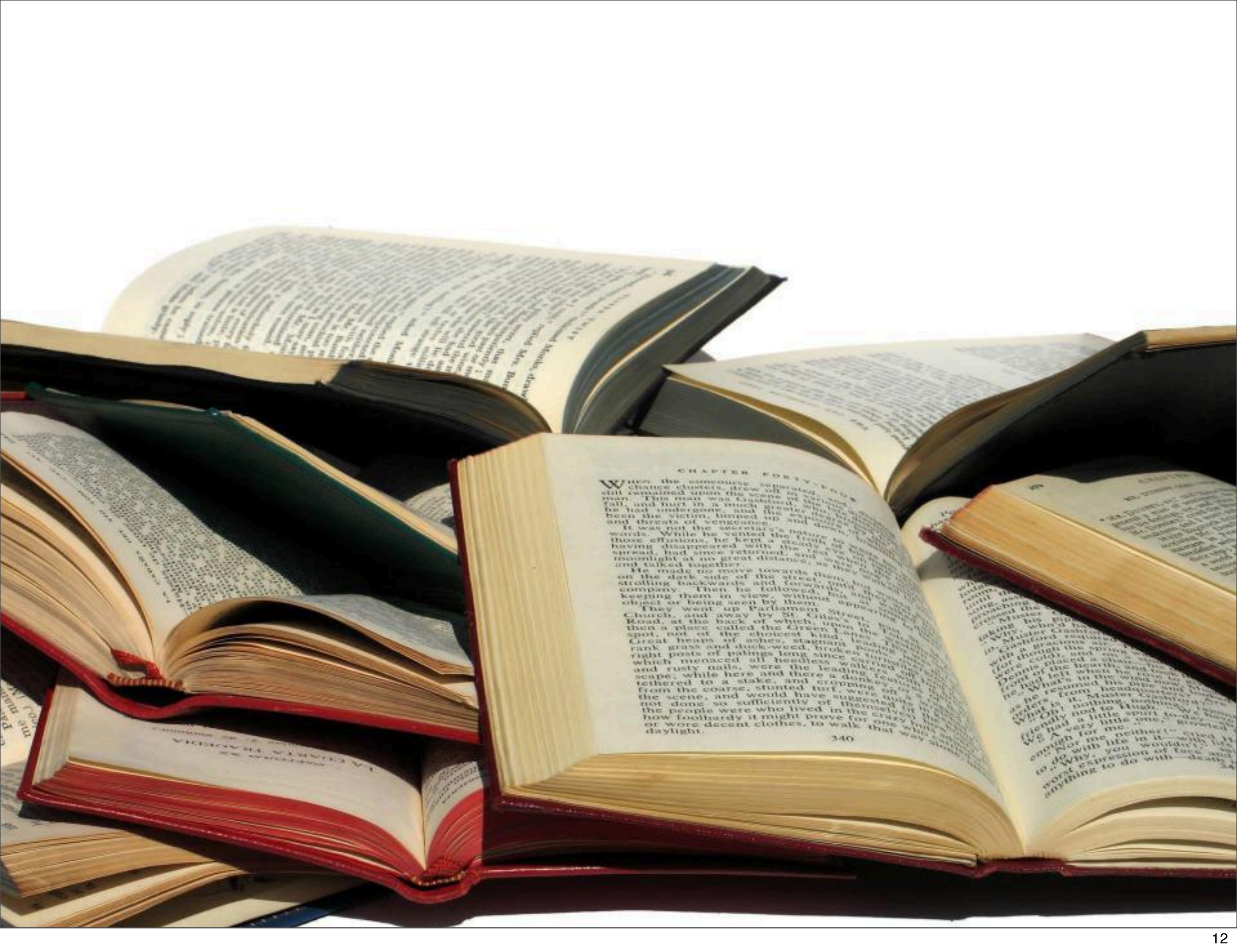
The Paradox





Dislike





CHAPTER FORTY-FIVE

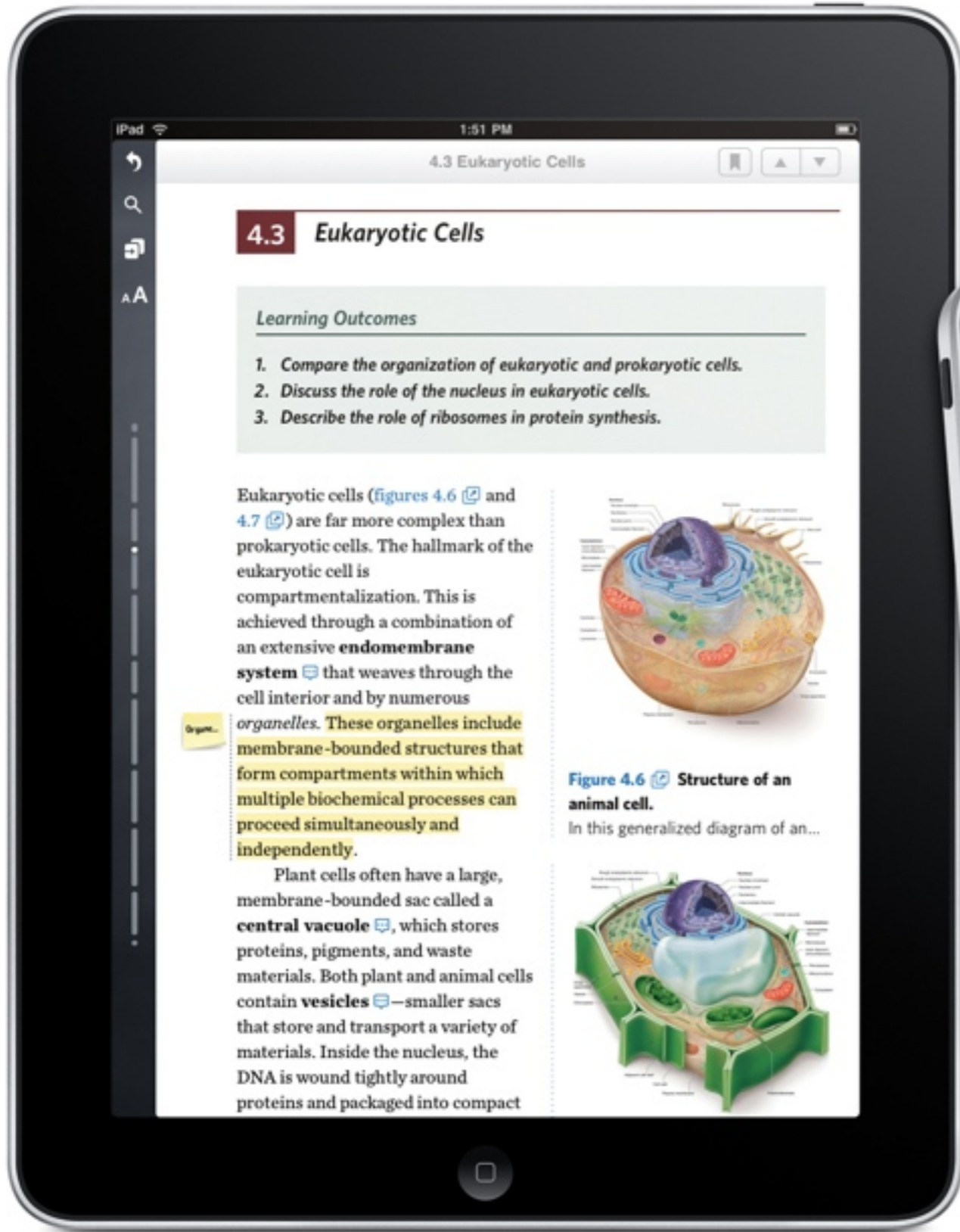
When the same ones separated, still remained upon the scene of the fall, and hurt in a much greater degree than he had undergone, and his expression had been the victim, limped up and down and threats of vengeance.

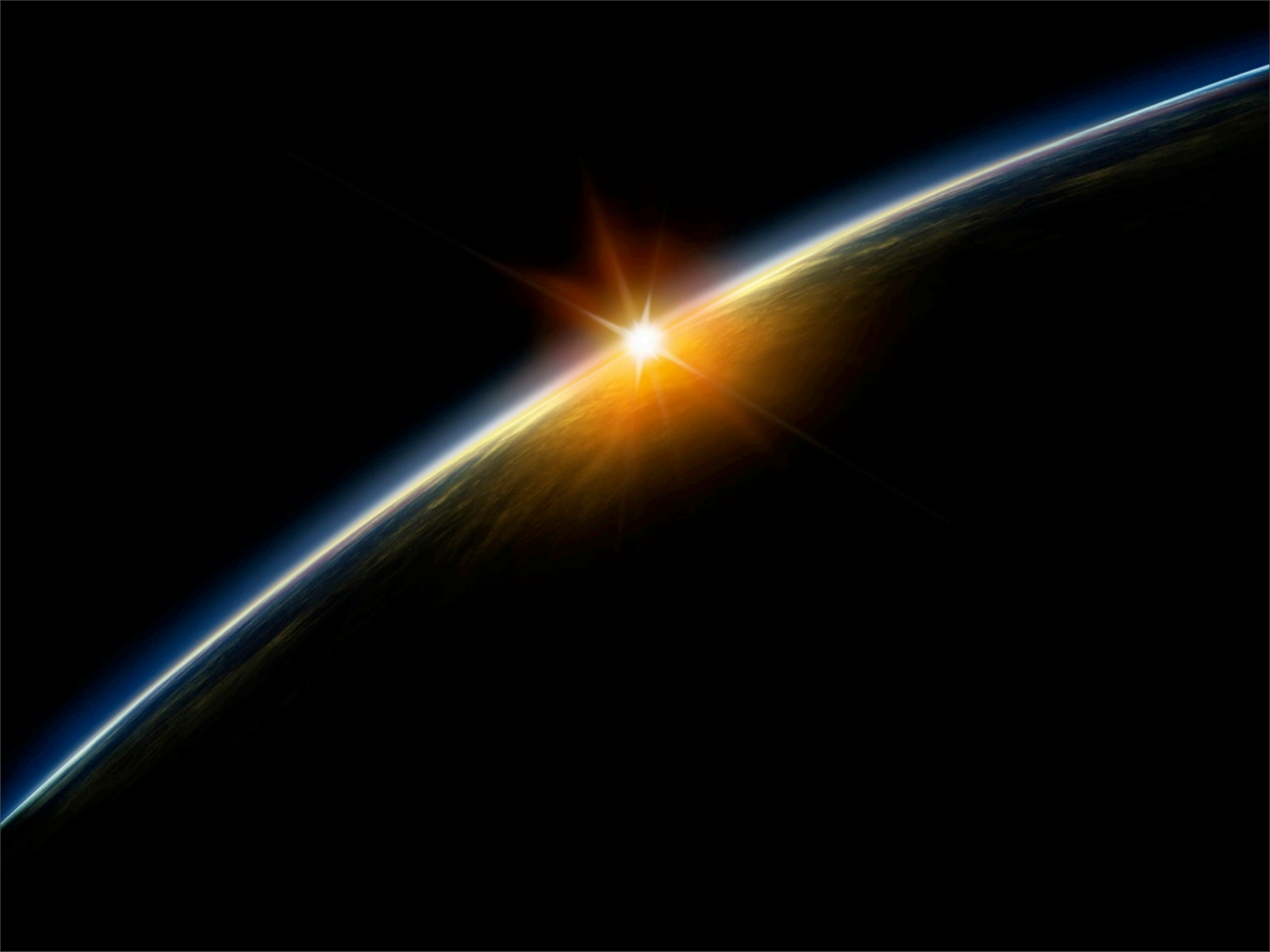
It was not the secretary's nature to words. While he vented the froth of those effusions, he kept a steady eye spread, had since returned, and went moonlight at no great distance, as they and talked together.

He made no move towards them, but in the dark side of the street, until strolling backwards and forwards in company. Then he followed, but at keeping them in view, without object or being seen by them.

They went up Parliament Street Church, and away by St. Giles's Road, at the back of which, upon a spot, not of the choicest kind, lay great heaps of ashes, stagnant pools of rank grass and duck-weed, broken right posts of palings long since which menaced all heedless walkers and rusty nails, were the leading scape; while here and there a donkey tethered to a stake, and cropping from the coarse, stunted turf, were the scene, and would have suggested not done so sufficiently of themselves the people were who lived in the how foolhardy it might prove for one or wore decent clothes, to walk that daylight.

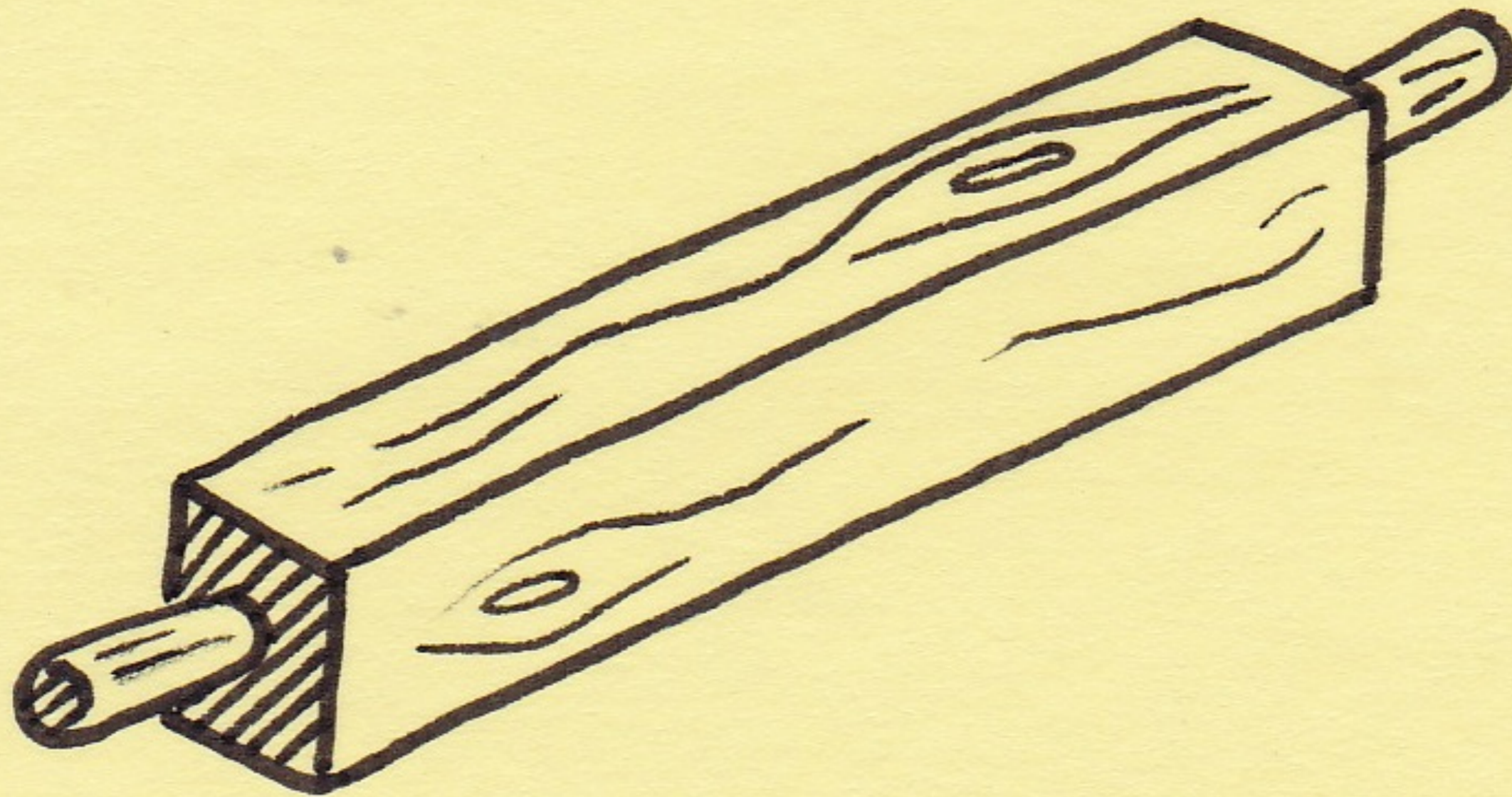
Why, who'd he taking his...
Mustard...
Gashford...
with a...
were cold, and...
Dennis placed a chair...
front of the hearth, and...
he had left when he...
he had resumed his pipe...
What's in the wind now...
as he resumed his pipe...
orders from head-quarters...
What is it, nothing...
Oh! nothing...
friendly nod to Hugh...
We had a little...
We A very little one...
enough for me...
Nor me neither...
enough with life in it...
to do with you wouldn't...
Why, you wouldn't...
worst expression of face...
anything to do with...
24





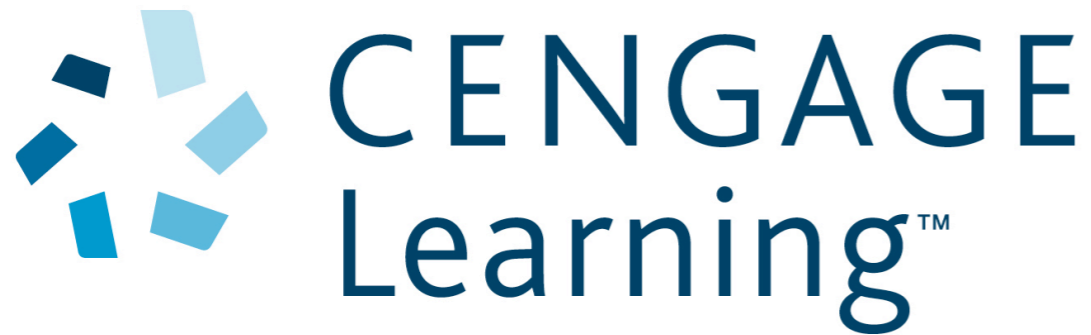


Students: PDF replicas are “clumsy.”



SOME ROLLING PINS
ARE LESS EFFICIENT.





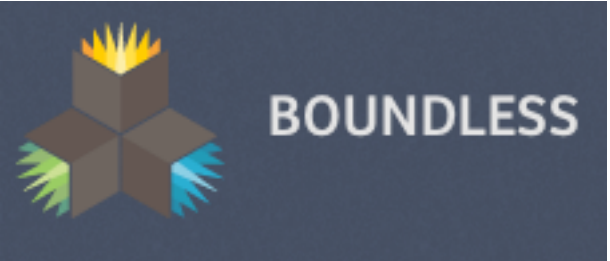
coursera

UDACITY
XXI CENTURY UNIVERSITY

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flatworld
KNOWLEDGE


inking


BOUNDLESS



edX

KHAN
ACADEMY


ELEVEN LEARNING

MITOPENCOURSEWARE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

 **iBooks**

$$\frac{\partial u_r}{\partial t} + u_r \frac{\partial u_r}{\partial r} + \frac{v_\phi}{r} \frac{\partial u_r}{\partial \phi} - \frac{v_\phi^2}{r} = - \frac{\partial}{\partial r} (h + \Psi + \Psi_*), \quad (1)$$

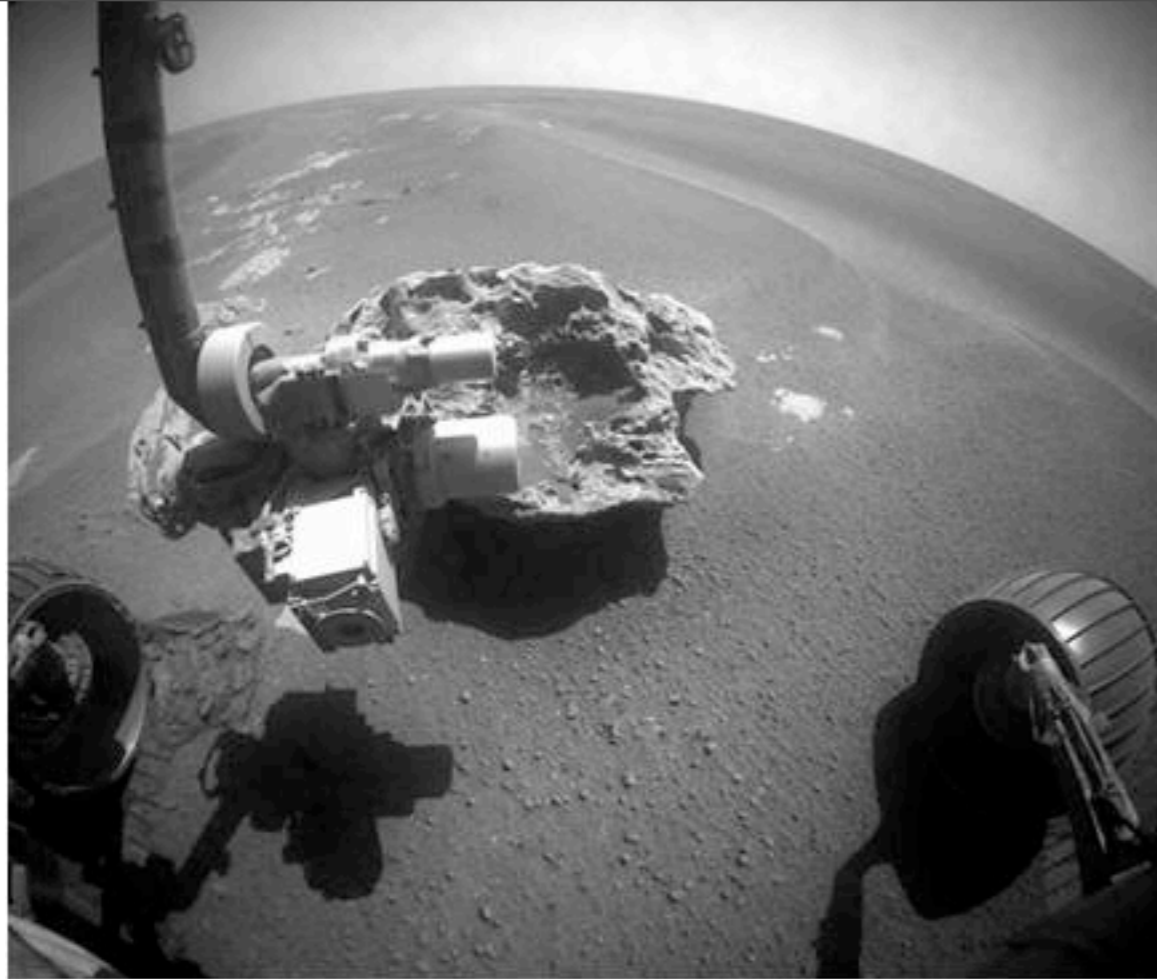
$$\frac{\partial v_\phi}{\partial t} + u_r \frac{\partial v_\phi}{\partial r} + \frac{v_\phi}{r} \frac{\partial v_\phi}{\partial \phi} + \frac{v_\phi u_r}{r} = - \frac{1}{r} \frac{\partial}{\partial \phi} (h + \Psi + \Psi_*), \quad (2)$$

$$\frac{\partial \sigma}{\partial t} + \frac{1}{r} \frac{\partial}{\partial r} (r \sigma u_r) + \frac{1}{r} \frac{\partial}{\partial \phi} (\sigma v_\phi) = 0, \quad (3)$$

$$\Psi(r, \phi) = -G \int_{R_{\text{in}}}^{R_D} \sigma(r') r' dr' \times \int_0^{2\pi} \frac{d\phi'}{\sqrt{r^2 + r'^2 - 2rr' \cos \phi' + \eta^2(r)}}. \quad (4)$$

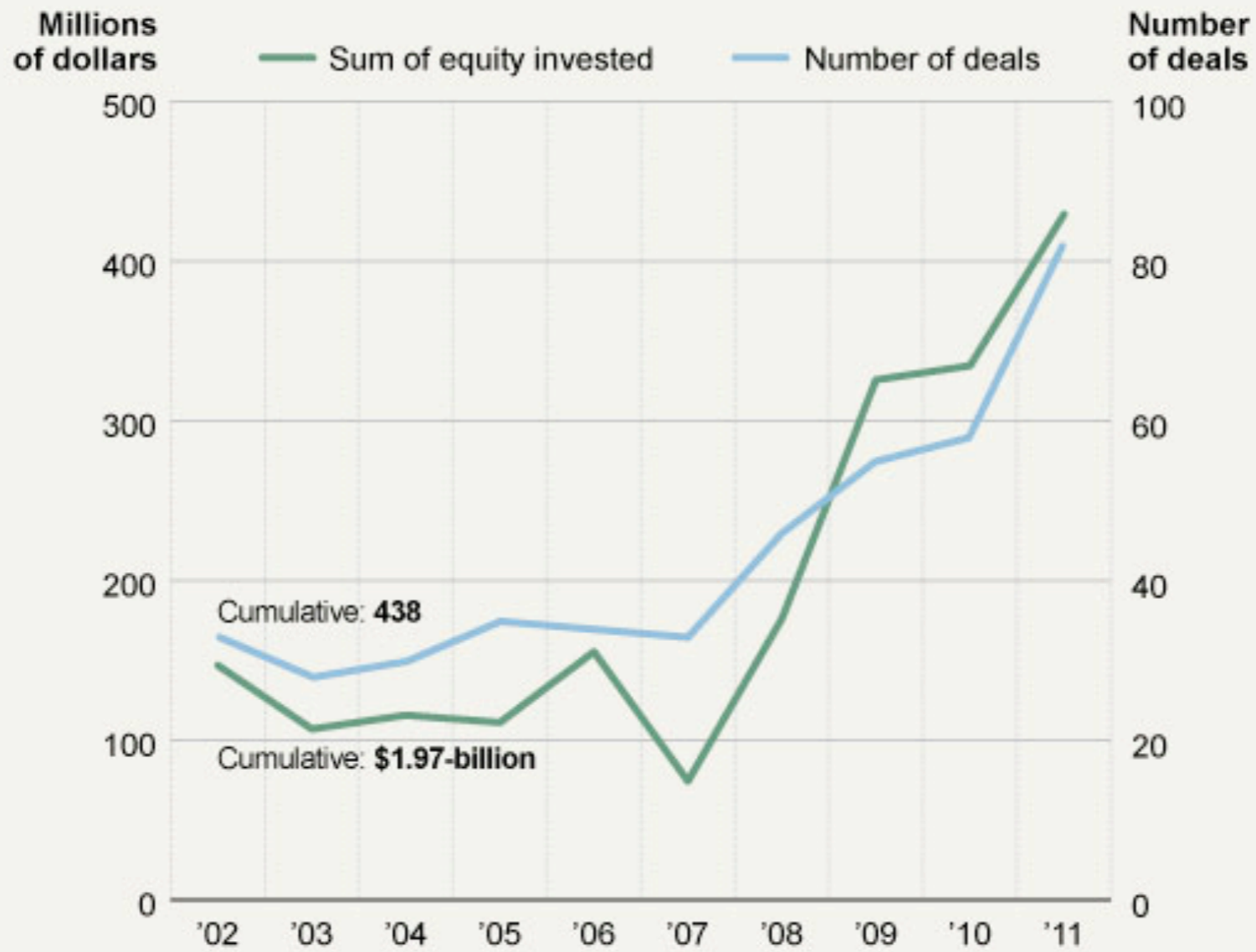
The Equation

- Entrenched big-name players
- +
- Unmet consumer needs
- +
- Rapidly evolving technology
- +
- \$20-billion global market = ??





Venture-Capital Investment in Education-Technology Companies



Note: Data include educational-technology companies in elementary and secondary education, higher education, lifelong learning, and informal education.

Source: National Venture Capital Association, Thomson Reuters



Whole Course
Solutions & Services

Whole Course
Solutions

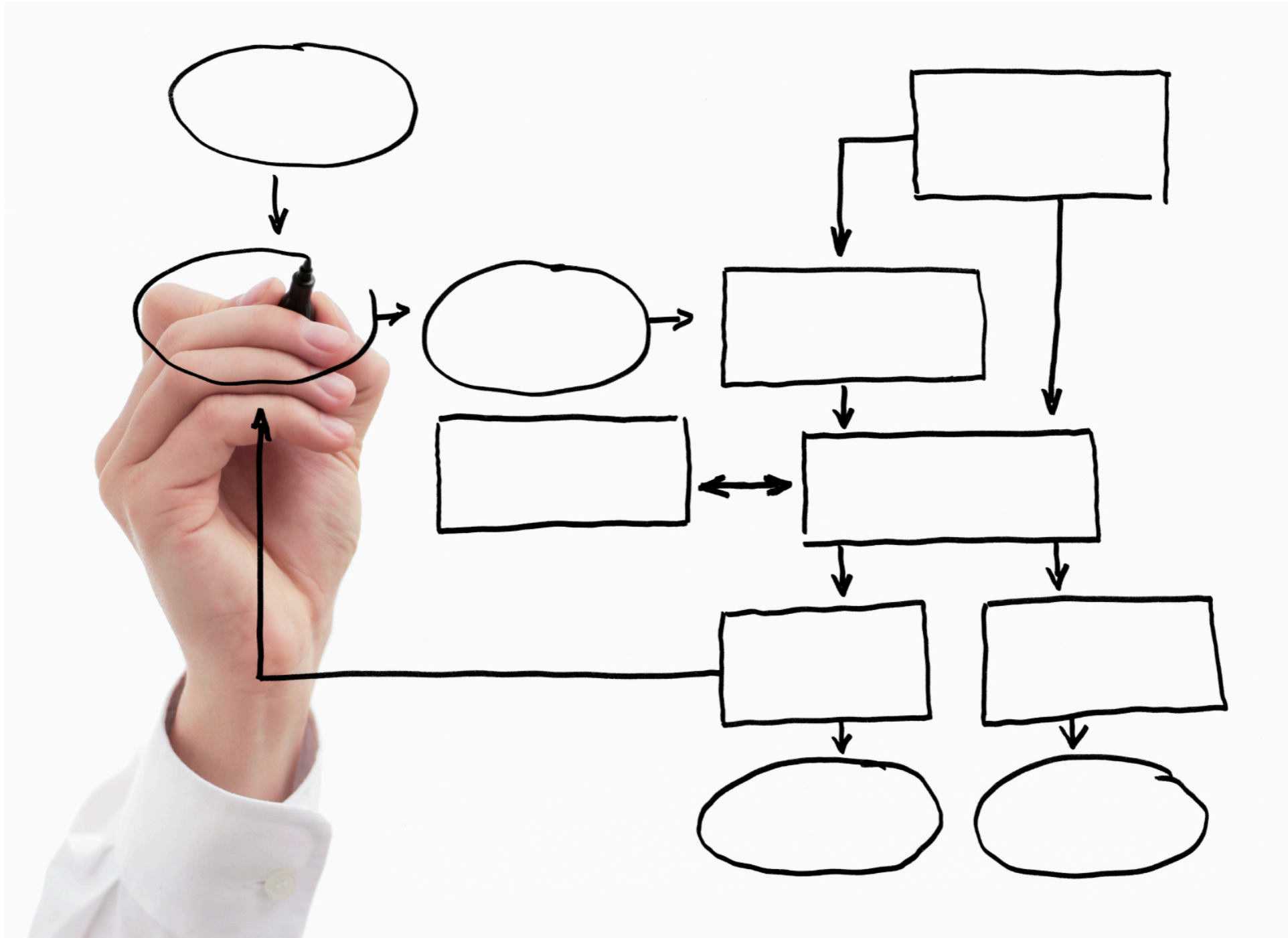
Assignable Digital
Textbooks

Digital Textbooks



Promise & Peril







$$\int_a^b f(x) dx = F(b) - F(a)$$

**INTEGRATE ALL THE
FUNCTIONS!**













A word cloud of thank-you phrases in various languages. The most prominent words are "GRACIAS", "ARIGATO", "SHUKURIA", "THANK", and "YOU". Other visible phrases include "DANKSCHEEN", "TASHAKKUR ATU", "SUKSAMA", "BIYAN SHUKRIA", "JUSPAXAR", "GOZAIMASHITA", "EFCHARISTO", "GRAZIE", "MEHRBANI", "PALDIES", "BOLZIN", and "MERCİ".