

STANLEY FLAT *in* LAND



by
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Pictures by
Noct Stash

STANLEY FLAT *in* LAND



He says he's just following instructions.

by
P.I. Bairn

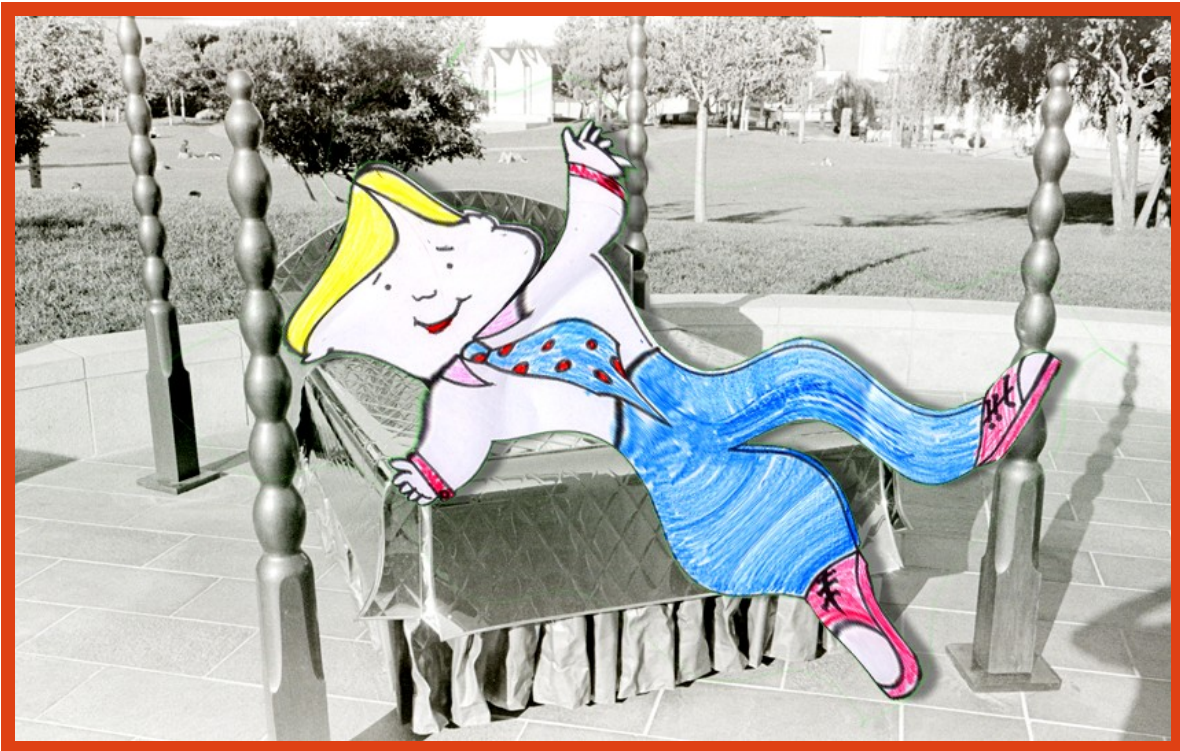


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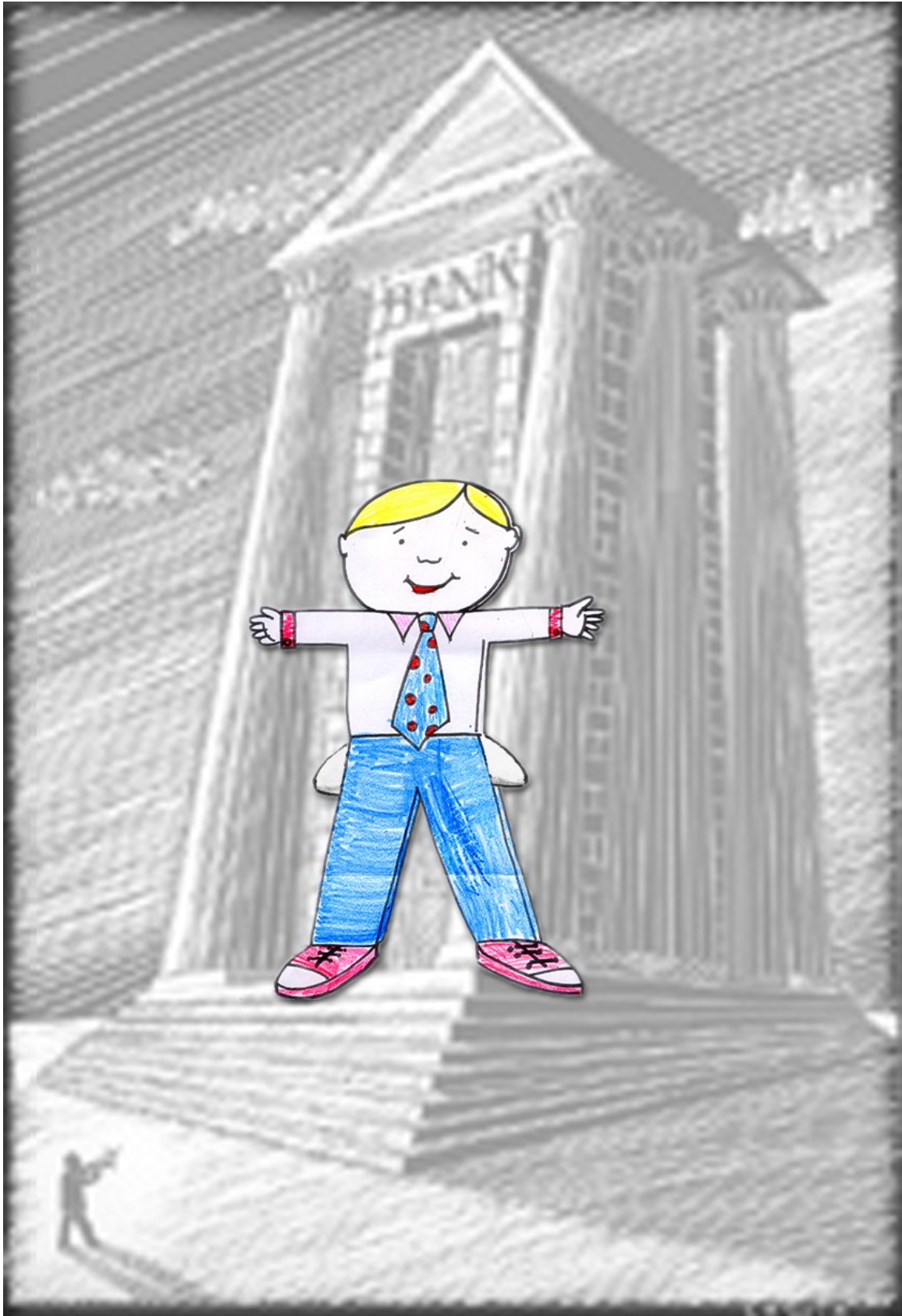
New York · San Francisco

Stanley Lambchop
woke up one new
morning and found
himself — like so
many mornings
before — in a new
twist on the same
old problem ...

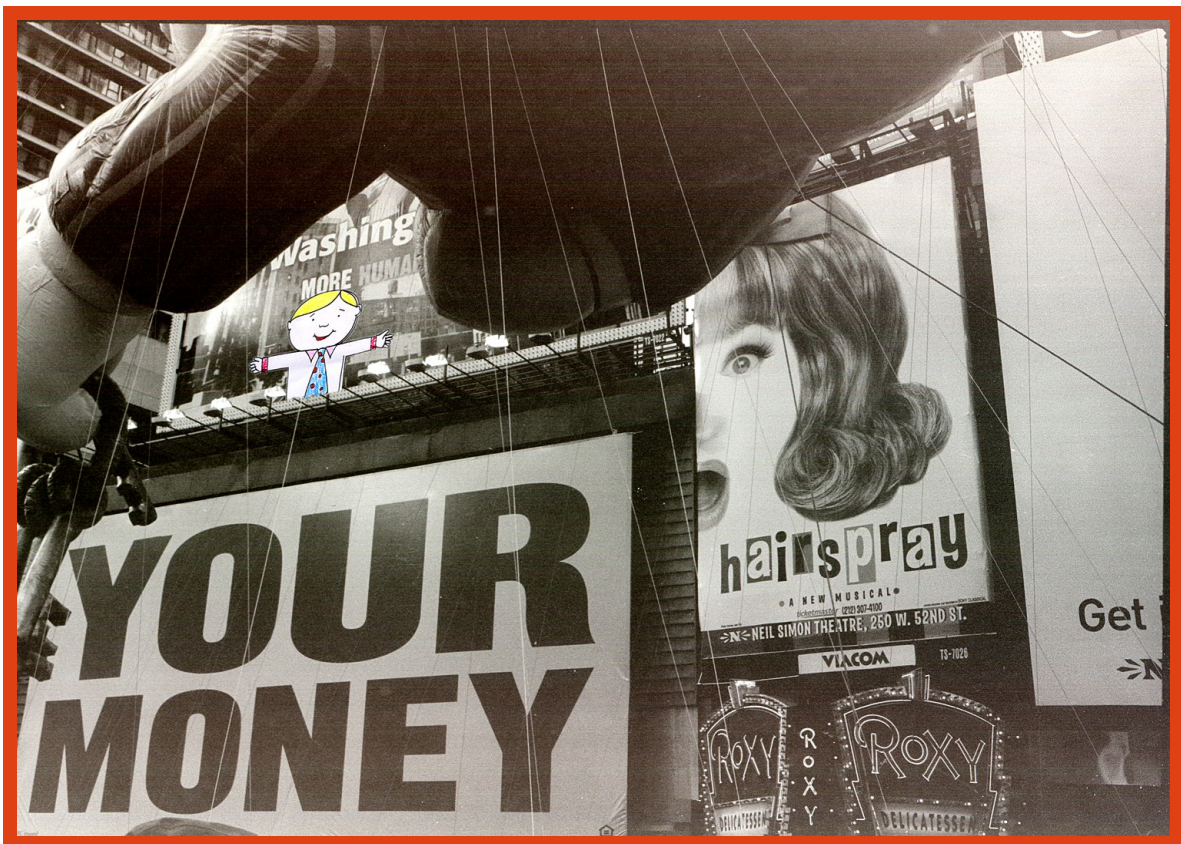
Stanley was not only still flat, as usual, but now he was also just plain *flat broke*.



(I guess that's why he was sleeping in the park.)



You see, an enormous
puffed-up man with a
top hat and a key ring
had flattened his bank
account with a Big
Board and then floated
away, smiling sweetly.



All the witnesses were
badly shocked.

Stanley's broker was no longer returning his phone calls.

He was “*broker than the Ten Commandments*,” as a musician friend of his used to say.

In those days, the
general economy was ...
well, you know.



Not much, Stanley. what's up with you?



Stanley's wise pastor,
the right Rev. Charles
F. Stanley, suggested
that he get flat on his
knees and pray on it.

So while he waited for
an answer from God,
Stanley decided to go
to the library.



At the library, there was a man
in the Chinese philosophy section
trying to solve a puzzle.

Being flat, Stanley was pretty good
at puzzles, and offered to help.



Stanley liked the library. It was free edu-tainment, and he could easily lose himself there in the stacks. He chose a book at random and just dived right in ...

Oddly enough, the book he found himself in was titled *Flatland*, written in the 1880s by Edwin A. Abbott. It was about people like him who live on a flat surface in two dimensions — and other people who live on a *line* in one dimension — and even people living on a *point* in zero dimensions!



Normal 3-dimensional people live in what Mr. Abbott called “Spaceland.”

"O day and night, but this is wondrous strange"



No Dimensions
•
POINTLAND

Two Dimensions
□
FLATLAND

A ROMANCE
OF MANY DIMENSIONS

One Dimension
—
LINELAND

Three Dimensions
□
SPACELAND



About a hundred years later, some scientists would speculate that we live in a universe that might have ten or eleven dimensions — even though most Spacelanders can only sense four of these dimensions: height, width, depth, and *time*.

The scientists called this idea *string theory*. One of them, Dr. Stephen Hawking, wrote a book about it that can be understood by most Spacelanders. The book is titled *The Universe in a Nutshell*. It says the universe might be made of membrane-like things of various dimensions called *p-branes*.



In the years after 1985, it gradually became apparent that string theory wasn't the complete picture. To start with, it was realized that strings are just one member of a wide class of objects that can be extended in more than one dimension. Paul Townsend, who, like me, is a member of the Department of Applied Mathematics and Theoretical Physics at Cambridge, and who did much of the fundamental work on these objects, gave them the name "p-branes." A p-brane has length in p directions. Thus a $p=1$ brane is a string, a $p=2$ brane is a surface or membrane, and so on (Fig. 2.15). There seems no reason to favor the $p=1$ string case over other possible values of p . Instead, we should adopt the principle of p-brane democracy: all p-branes are created equal.

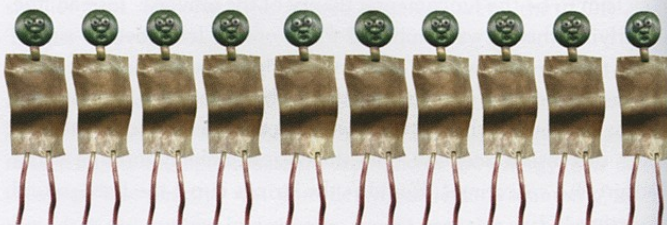
All the p-branes could be found as solutions of the equations of supergravity theories in 10 or 11 dimensions. While 10 or 11 dimensions doesn't sound much like the spacetime we experience, the idea was that the other 6 or 7 dimensions are curled up so small that we don't notice them; we are only aware of the remaining 4 large and nearly flat dimensions.

I must say that personally, I have been reluctant to believe in extra dimensions. But as I am a positivist, the question "Do extra dimensions really exist?" has no meaning. All one can ask is whether mathematical models with extra dimensions provide a good description of the universe. We do not yet have any observations that require extra dimensions for their explanation. However, there is a possibility we may observe them in the Large Hadron Collider

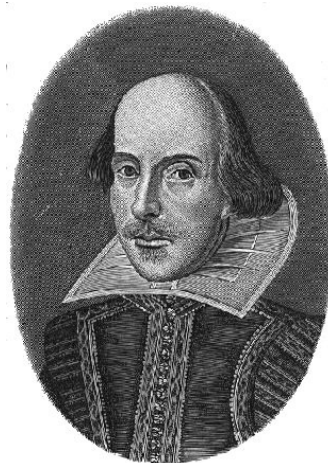
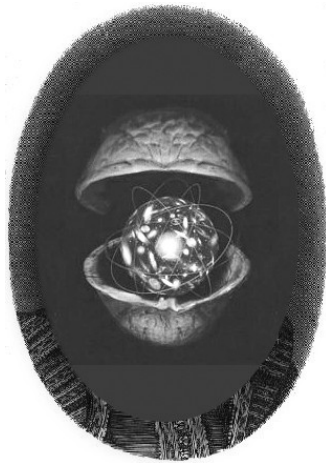
(FIG. 2.15) P-BRANES

P-branes are objects that are extended in p dimensions. Special cases are strings, which are $p=1$, and membranes, which are $p=2$, but higher values of p are possible in ten- or eleven-dimensional spacetime. Often, some or all of the p -dimensions are curled up like a torus.

*We hold these truths
to be self-evident:
All p-branes
are created equal!*



The title “*Universe in a Nutshell*” reminded Stanley of something in a play by Mr. William Shakespeare, called *Hamlet*.



Since he was already in the library, he thought he'd take a look for it. It was easy to find. They had a lot of books by and about Mr. Shakespeare.

On Fortune's cap we are not the very button.

HAM. Nor the soles of her shoe?

225

ROS. Neither, my lord.

HAM. Then you live about her waist, or in the middle of her favors.

GUIL. Faith, her privates we.

HAM. In the secret parts of Fortune? O, most true, she is a strumpet. What news?

ROS. None, my lord, but that the world's grown honest.

HAM. Then is doomsday near. But your news is not true. Let me question more in particular. What have you, my good friends, deserved at the hands of Fortune, that she sends you to prison hither?

GUIL. Prison, my lord?

HAM. Denmark's a prison.

ROS. Then is the world one.

HAM. A goodly one, in which there are many confines, wards, and dungeons, Denmark being one o' th' worst.

ROS. We think not so, my lord.

HAM. Why then 'tis none to you; for there is nothing either good or bad, but thinking makes it so. To me it is a prison.

extraordinary
-revealing

ROS. Why then your ambition makes it one. 'Tis too narrow for your mind.

HAM. O God, I could be bounded in a nutshell and count myself a king of infinite space, were it not that I have bad dreams.

if there is
no objective
behavior

GUIL. Which dreams indeed are ambition; for the very substance of the ambitious is merely the shadow of a dream.

250

HAM. A dream itself is but a shadow.

ROS. Truly, and I hold ambition of so airy and light a quality that it is but a shadow's shadow.

If I think
the action
is good, another
way think
it bad

HAM. Then are our beggars bodies, and our monarchs and outstretched heroes the beggars' shadows. Shall we to th' court? for, by my fay, I cannot reason.

BOTH. We'll wait upon you.

HAM. No such matter. I will not sort you with the rest of my servants; for to speak to you, honest man, I am most dreadfully attended. But to make you at Elsinore?

ROS. To visit you, my lord; on.

HAM. Beggar that I am, I am in thanks, but I thank you; and sure, 'tis too dear a half-penny. Were you not sent a free visitation? Come, come, nay speak.

GUIL. What should we say,

HAM. Why anything but that

You were sent for, and

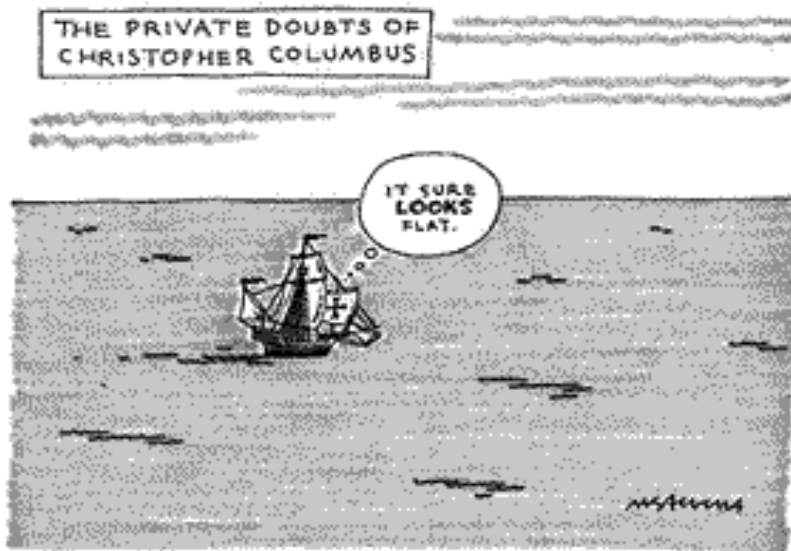
224. button knob on the top of
256. fay faith.

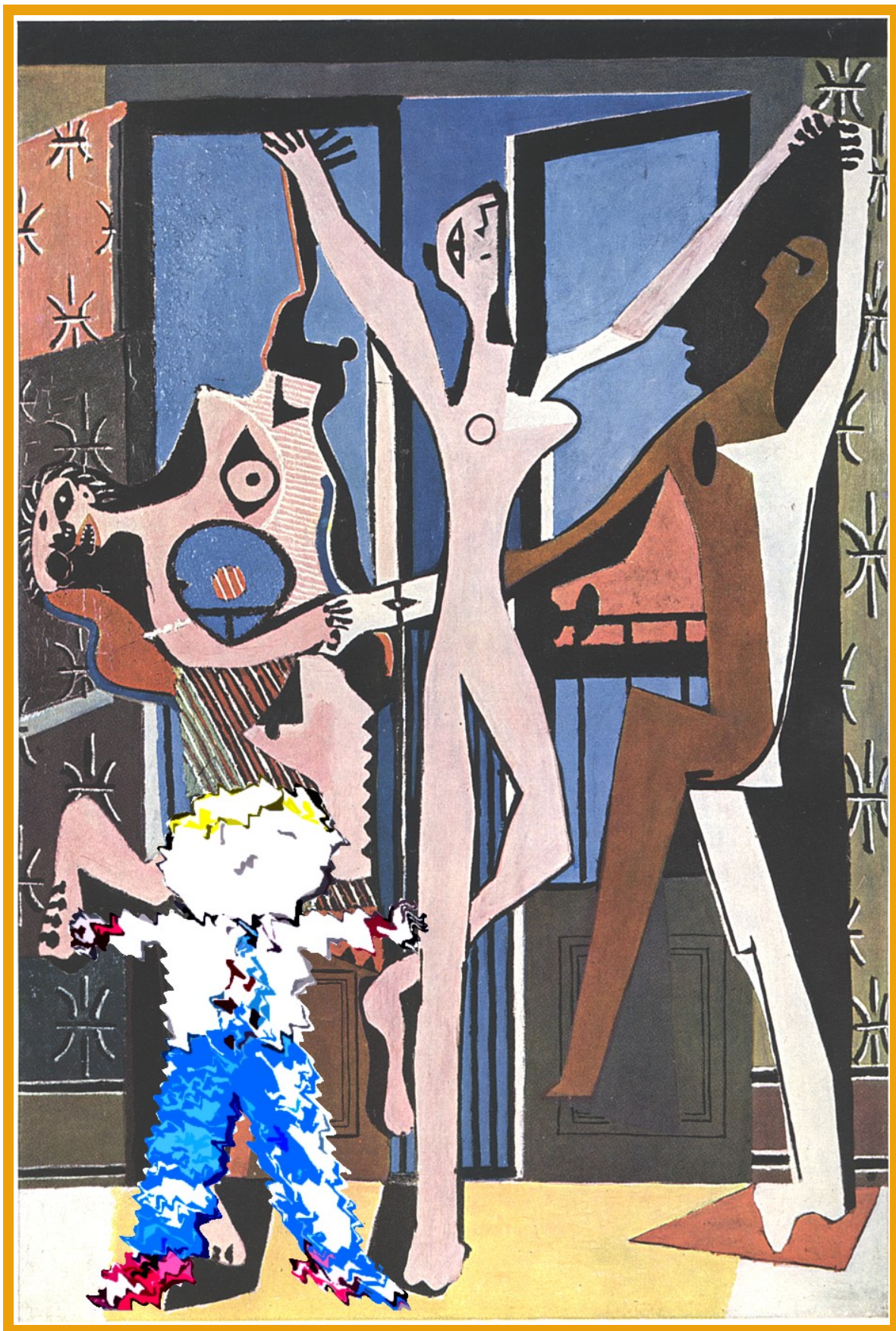


Stanley sometimes thought of the library itself as infinite space. The vastness and flatness of all those pages seemed good to him.

Not only could he travel through space there, he could travel through *time*. Once, his History class went on a “field trip” through time.

It was actually a sea voyage.



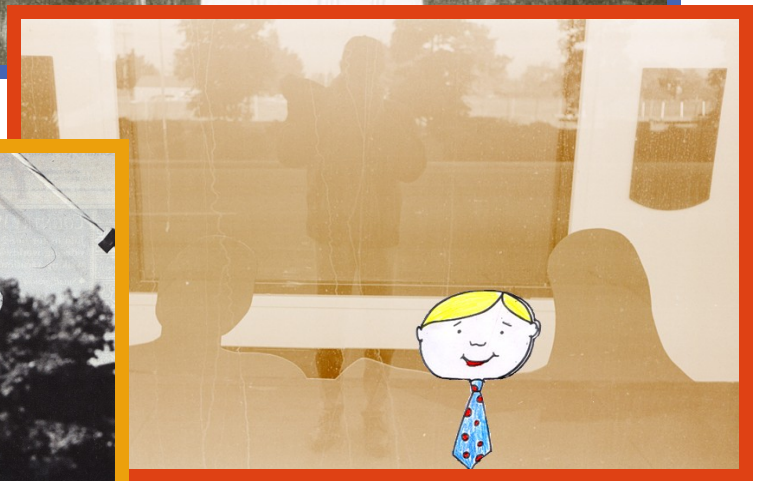
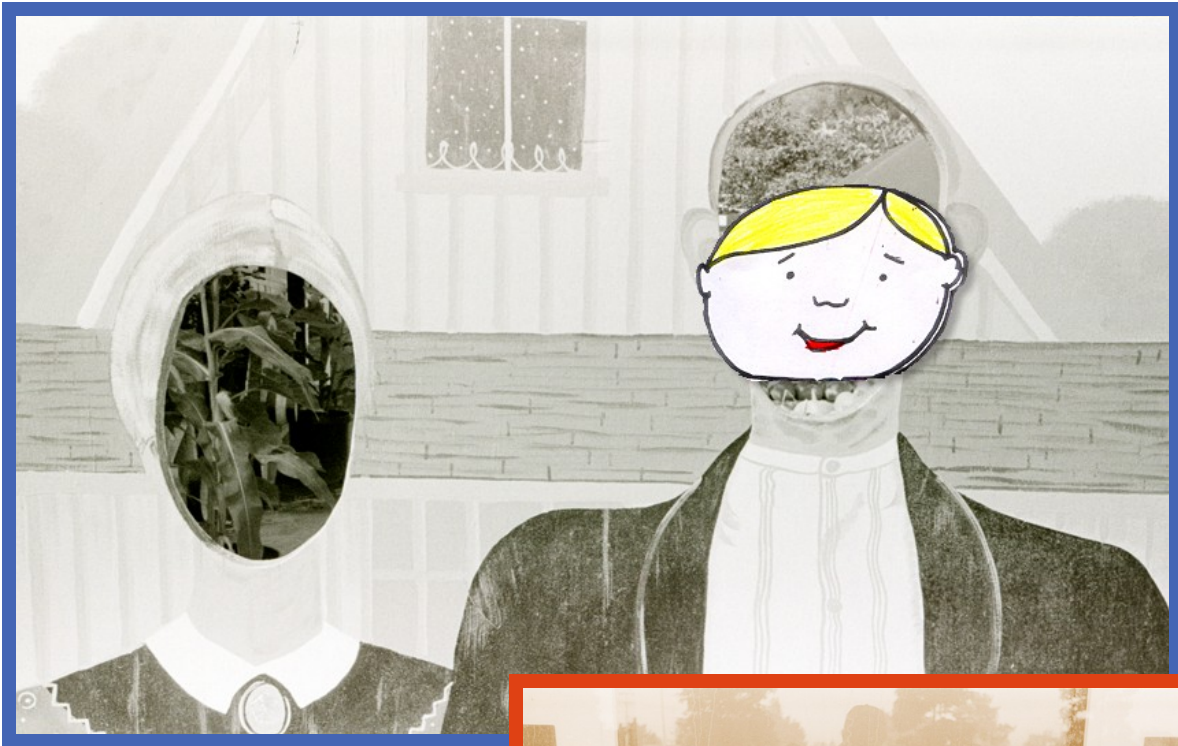


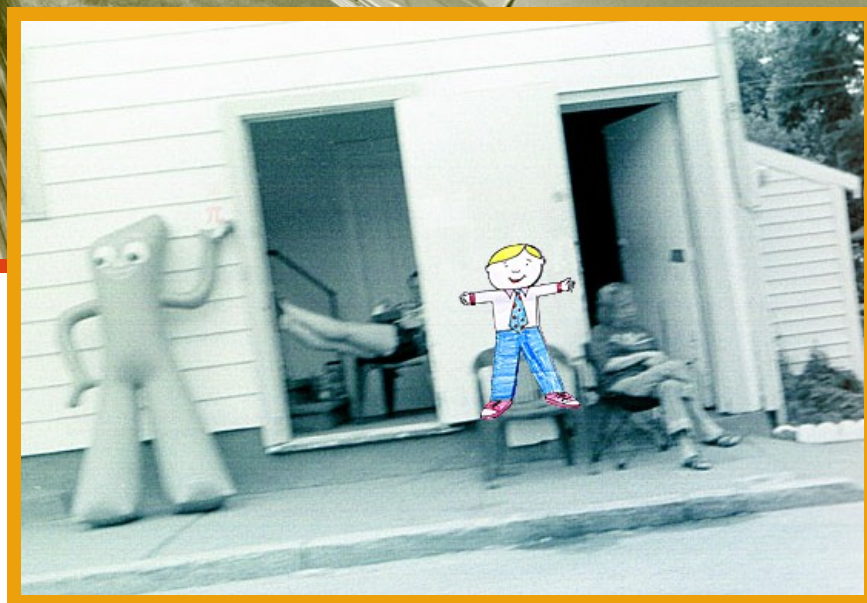
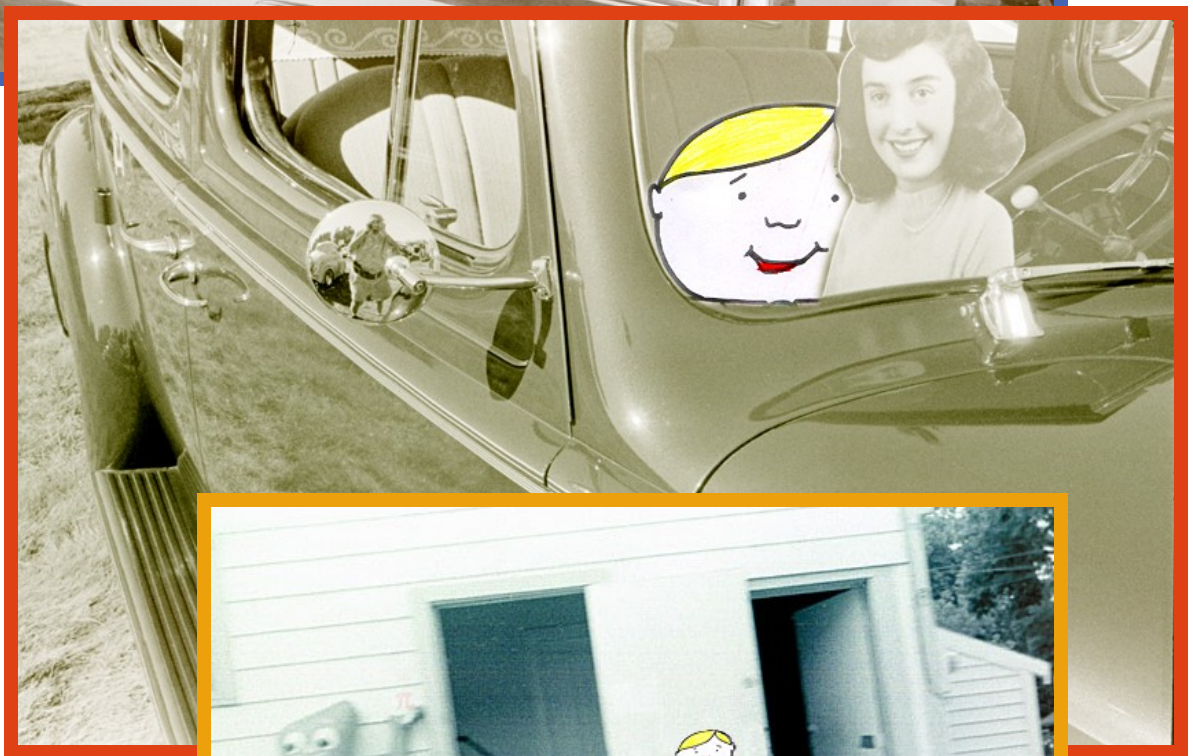
Another time, Stanley mingled with some of the most influential artists on the vanguard of the modern aesthetic. (“Modern” was a term they used to describe what is now called “the old days.” They started around 1900.)

He was a little nervous at this party, where he got to meet one of his heroes, a painter named Pablo Picasso.

This painter was famous for being a member of an art movement called *Cubism* — which Stanley thought a little strange, because most of the people in the paintings looked really *flat*, as did their furniture and their guitars.

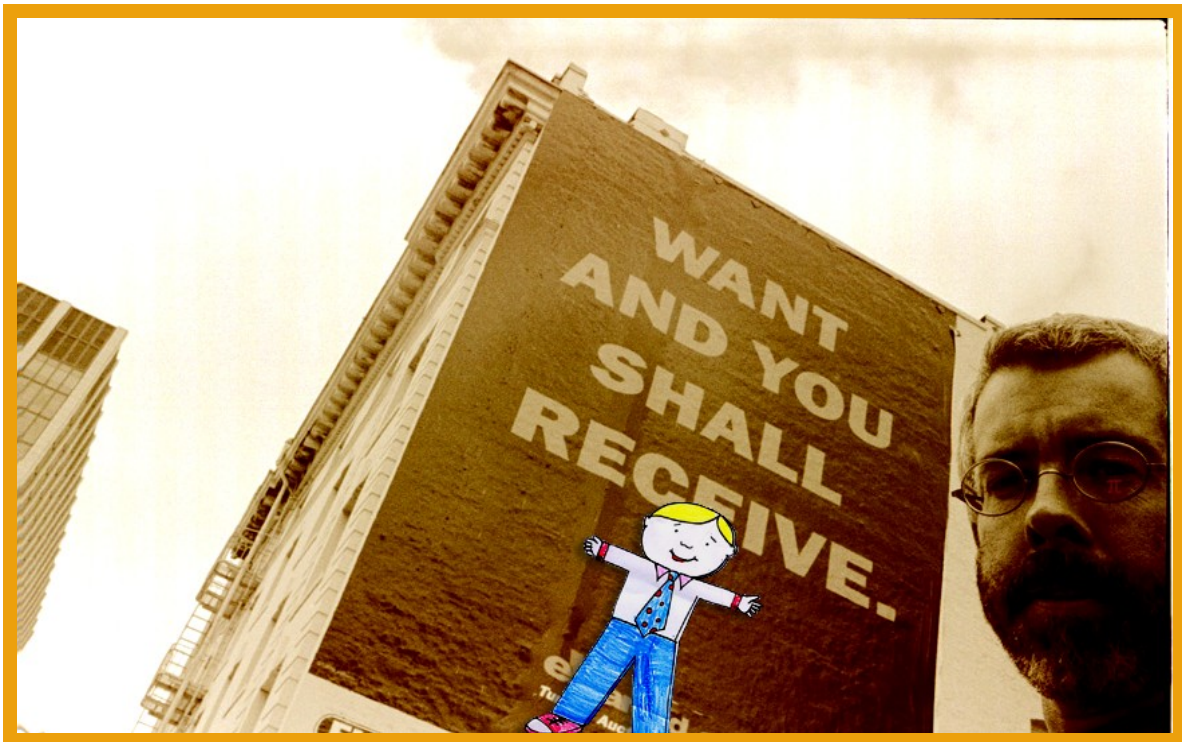
Everywhere Stanley went, he would discover more and more flat people. Some of them wore old-timey clothing and listened to American Gothic music.







In Tel Aviv, Stanley made good friends of some ladies who were working in the advertising business, as do quite a few other flat folk around this big round world.



Through professional connections they found Stanley some work in advertising too. He was glad to get it, and he even started feeling alright about big boards again.

Stanley was now beginning to feel so good that his physician, Dr. Dan, stopped trying to push the medication he had wanted to prescribe to mitigate what he called Stanley's "flat affect."

Pretty soon, the news of Stanley's improvement got around to his great-uncle, the famous self-described hillbilly musician Ralph Stanley, whose friend Lucinda Williams needed an accordion player for her next tour, which featured songs from her recent CD, *World Without Tears*.

Stanley was so happy to get the gig that he broke down and cried.



According to everyone who saw the shows, he was a real “wild man” on his instrument.

His antics quite tickled Lucinda.

Because of the work in advertising and music that had come his way, Stanley was no longer flat broke. In fact, he now had more money than he needed.

He expressed his thankfulness to God for delivering him from penury by giving a good part of his newfound wealth to his church's Deacons' Fund (which had been established to help other people who were flat).

Then he went out and bought the big new flat-screen television that had struck his fancy. On it he would watch his favorite cartoons, and there were times when he couldn't help but smile a little when the evil "Wile E. Coyote" would fall off a very high cliff and get flattened on the desert floor below. . . .





*The author, all puffed up
and attempting to defy gravity.*

STANLEY FLATLAND



Not Stash
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author of STATFLANLEY
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