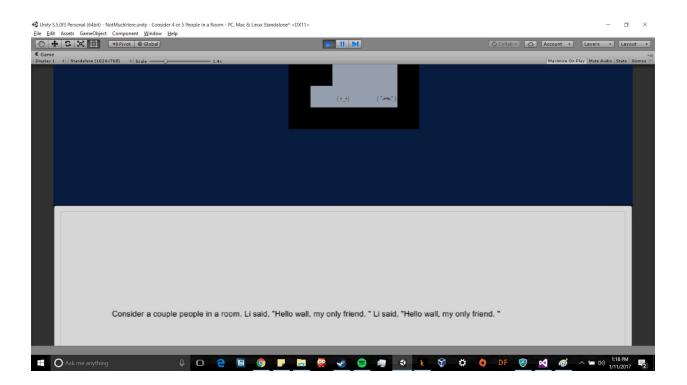
As Though on Mars

by Kavi Duvvoori



May 2017

| As Though on Mars | 1 |
|-----------------------------------|----|
| Text Residue | 1 |
| Assets/txts/ConsiderAnIntro.txt: | 3 |
| Assets/txts/AboutObjects.txt: | 9 |
| Assets/txts/AboutAl.txt: | 13 |
| Assets/txts/AboutOccurrences.txt: | 19 |
| Assets/txts/AboutAlison.txt: | 23 |
| Assets/Txts/AboutDialogue.txt: | 28 |
| Assets/txts/AboutLi.txt: | 37 |
| Assets/txts/AboutQiana.txt: | 41 |
| Assets/txts/Survey.txt: | 45 |
| Assets/txts/AboutVivek.txt: | 49 |
| Appendix | 56 |
| A: "Not Poetry" Intervention | 56 |
| B: Assets/txts/ViewsInRoom.txt: | 58 |
| C: Sokal Dialogue | 69 |

The failed experiment left certain artifacts - text files on the drive - that may<ME>, not entirely fruitlessly,<ME> be read.

The game was nowhere anyone would want to linger, but if you listen carefully<ME>, perhaps,<ME><PHYSIOGNOMY> holding fingers over your eyes and rubbing your forehead into meaning,<\PHYSIOGNOMY> there are almost people almost talking.

Assets/txts/ConsiderAnIntro.txt:

<CONSIDERANINTRO>

<FRONTMATTER> DIRECTIONS FOR USE (PLEASE READ THIS AS SUCH, AND
NOT ARTISTICALLY)

-Navigate the map with the "WASD" keys. The "1" key resets the camera. Some other keys force interaction (avoid the space bar if you are allergic to profanity).

-In the pre-simulation configuration screen choose a location (the earth orbit setting option should be treated as an "easter egg" feature and may thus be less reliable than the others) and a building architecture. The other options - physiognomic description, my intervention, ambient angst level, and speed - may be adjusted freely, if perhaps at a certain cost in cohesion.

- This alpha build lacks an ending: quit when nothing new seems to be happening

LITERARY WRITING BEGINS BELOW: <\FRONTMATTER>

<INTRO>

Consider four or five people in a few rooms.

Watch how their gaze traverses exhaustively, as it surveys and compares the habitat to its descriptions and illustrations and

scale model, settles on a well-lit corner to move a cushion into or on an exposed pipe protesting too much. For the experiment to be successful, the crew had been reminded to forget that there is anywhere else through the door; it would become easier (Mission Support said: though were it really known the crew wouldn't have been being paid to stay in the Hab) after the first couple weeks<NOTSPACE>, and anyway, the hatch door as it was closed was locked - though let this not suggest that their presence in the habitat was caused by something other than choice, and that the fire-alarm wouldn't also let them out</NOTSPACE>.

They unpacked crates, unpacked the pots in the kitchen and put the soap by the compost-toilet, pinned up pictures and posters and flags by their beds and desks. They walked repeatedly across the whole floor carrying just a scissors or a dropped wrapper for the trash compactor, apparently careless with time but also measuring out and establishing the paths of the infra-ordinary: the walks the legs of the pacers in the crew (Al's, Alison's, Vivek's) would automate when they wanted to think about something else, perhaps the wording of an email that was going to be delayed, inevitably, technically, by 20 minutes.

The habitat's walls are tent-like in the draping of their insulation, triangulated around nodes at the vertices, with long

lights orienting the roof into a kind of segment or circuit.

Outside, <HAWAII> red rock remained stagnant, a

volcano<\HAWAII> <SKOLKOVO> spaced trees, a field, parking lot,
and the first of Moscow's stacked apartments past

it<\SKOLKOVO> <EARTHORBIT> out the closed window, cloud texture

over water, and the bright horizon line <\EARTHORBIT> <BANGALORE>

a spacious compound, cracked and dry orange mud with only a few

flies buzzing and birds twittering over its heat, barbed wire

over the wall and the thick street filled further out with

hollowed honking <\BANGALORE> <BOAT> steady waters and loose fog

<\BOAT> <\INTRO>

<ICEBREAKER>

<ROB> Why don't we start this training with a round of
icebreakers - I know what you're thinking, you're all going to
have a little too much time to get to know each other, but why
not try to start things off on the right foot. How about we go
around and say: names, specialty, what you are most looking
forward to about AS-MARS, and, let's see .. if you were a
vegetable what vegetable would you be? <PAUSE>
I'm Rob. I'll be directing training and talking to you from
Mission Support. I can't wait to hear about your discoveries and
experiences. And, tomato. People would tell me I am a fruit, but
I would insist that I was a vegetable. <ROB>

<VIVEKICEBREAKER>

<ALISONICEBREAKER>

<QIANAICEBREAKER>

<ALICEBREAKER>

<LIICEBREAKER>

<\ICEBREAKER>

<JUMPFORWARD> We'll come back a week later, when the place is a
little more in order. Anyway, sensors in their pockets do track
who stands close to whom, so the interpersonal drama of their
aggregate motions will not be lost to science.

<NOTCANCELLED>

The mission was not cancelled. In its failure of cancellation, it was like the other 8 missions, and thus not reported on very much and primarily scientifically relevant as the enlargement of several statistics. That said, <HAWAII> the Honolulu Star-Advertiser<\HAWAII><SKOLKOVO> Vechernyaya Moskva <\SKOLKOVO><EARTHORBIT> The Guardian<\EARTHORBIT><BANGALORE> The Deccan Herald<\BANGALORE><BOAT> The Los Angeles Times<\BOAT> ran a piece when the crew emerged, with a video on their website. Back in the world, the crew enjoyed sunshine and meat, family and crowds, and found the internet a mixed blessing but appreciated their martian year as a most useful anecdote -

justification, distinguishing mark, argument for entry. They would remember, on certain streets or around Citrus Magic disinfectant cleaners, the sometimes-beautiful totality of AS-MARS' muffling. <ME> For a reasonably accurate approximation of what they might have to say about it, you may consult the exit interviews of the Mars-500 crew on the Russian space agency's website, or the various post-mortems on the blogs kept by the HI-SEAS-4 crew. <\ME>

<\NOTCANCELLED>

<CANCELLED>

The mission was cancelled, <NOTSPACE> and by the evening different cars drove the crew all home with the habitat emptied not much later <NOTSPACE> <SPACE> and the next resupply mission to the ISS made space, at enormous expense, brought them back to the ground <\SPACE>. In its cancellation, the mission guaranteed another round of 10 AS-MARS missions, to find the repetition of and thus the pattern of its failure. Several autopsy reports were commissioned, which came up with varying suggestions but which converged on the broad idea that something had been said or had occurred wrong, that the exact thing that went wrong was as unidentifiable as the sand grain between scatter and heap, but that this failure of cohesion accelerated into entropically irreversible dysfunction; still, further research could identify

}

what refinements to crew-selection and operating procedures should be implemented to prevent this fatal collision from occuring again during that one unsalvageable multi-billion spectator mission to the red planet. Inconsiderately perhaps, Mission Support were excited by this failure as it made their work interesting (science advancing, after all, in the swerve from the expected) and likely to remain. Still, <ME> to return to named characters, <\ME> the freed crew enjoyed sunshine and meat, family and crowds, found the internet a comfort, and jogged with appreciation through air without walls. They would remember, on certain streets or around Citrus Magic disinfectant cleaner, the often-terrifying totality of AS-MARS' muffling. They'd mention their half-year there late, as something complicated and a bit sad, as something through which the private significance of themselves might be introduced. <\CANCELLED> <\CONSIDERANINTRO> public IEnumerator PaceRepeatedly (int num paces) { for (int i = 0; $i \le num paces; i++)$ if (stop me == true) break; PaceOnce(); yield return new WaitForSeconds (4.5f);

```
}
```

Assets/txts/AboutObjects.txt:

<FLOOR> Nothing in this drawer. <\FLOOR>
<WALL> Each wall hangs. A tent keeps heat, and facilitates
(dis)assembly. A gradient is in each by shadow, and at a
distance they gradiate as roof also. <\FLOOR>

<TABLE> The tables are a just agitated white ground over the black floor, their corners rounded off: ambiguity lifting.

<COUCH> The couch is a kind of colliding, with its sliced reflection hurt on firm black matte fabric. <\COUCH>

<BED> The bed here is quite enclosed, being separate: a certain
troubled angularity arises. And how the secondary position, the
reiteration in wrong colors, is where they occur. Warming and
not a walk make the catalogue of extreme distance or the
difference of a clever song; and any neglect made manifold is
not a vent or not enough for a trembling.

<TV> The TV doesn't get cable, obviously; the frame without options.<TVOFF> The black of the screen is deeper than one

projected, and reflects askew the rest of the room, the padded roof. <\TVOFF><GAME> In this game a mountain range fills out the screen. Rain falls fast and wind bends the trees as an armored woman ever at the screen's exact center slashes her rune-glowing sword this way and that, though no one is yet in her way.

Precise lightning splits sky around its sudden bends.

<\GAME><\TV>

<COMMLINK> The comm-link is a desk of switches and indicator
lights <NOTINSPACE>, most of them doing nothing. At the back of
the table, a restricted router blinks. <\NOTINSPACE>. <ME> The
emails passing through it are for the crew, only. A successfully
simulated subject must own and be swerved by some black box we
cannot read from. </ME> Requests for information are answered
though news is not sent. <\COMMLINK>

<PLANTER> Here are such regular dirt furrows in transparent
enclosure. Reddened, blued, and a greening, the surrounding
polyethylene holds dropletted water and opacity, preparing rain.

<SHELVES>

Several shelves occupy the closet, containing: <#BLACKBEANS> cans of black beans, <#GARBANZO> of garbanzo beans, <#SPAM> of

spam, <#PINTO> of pinto beans, <#CORN> of corn, <#TOMATO> of tomatoes, <#CHEEZITS> bags of Cheez-its, and <#MISCFOOD> assorted others. The bean tins each say Prudencio foods, a matte bowl of them pasted around the metal. In 1931, Prudencio Pérez arrived in Lower Manhattan from Spain, after a 3 year sojourn in the Dominican Republic ending with Trujillo's presidential inauguration. With inherited plantation money but a fear of inflation, Prudencio and his wife Camila began importing, storing, and selling from a single small storefront peppers and olives, sardines and olive oil for a growing American Hispanic consumer market hoping for authentic foods both high-quality and fresh-tasting. Following the phrase "With Prudencio, we promise perfection," this operation grew in size, catalog, revenue, and renown over both years and decades, till moving headquarters to Brooklyn in 1959 and Newark, New Jersey in 1973, the year after Camila's death and before Prudencio's. Of Prudencio's 3 children, Jorge, the first became an unrenowned but comfortable painter of seaside scenes and Valeria, the third, a lifelong professor of history, but Sylvia, the second, demonstrated an organizational talent even sharper than her father's and became Prudencio Foods unofficial director behind an unremarkable man immediately, and official control in 1982, at which point Prudencio Foods offered 1,200 products via distribution centers as distant as Merced, California, and Seattle, Washington. It

was only three years later that a cartoonized portrait of the
original Prudencio became the successful voice of the product
line - and their new incursion into premium frozen soups leading to the supply chain's transport of 1,900 products, from
Georgia and Illinois. Sylvia bought a quiet mansion in Western
Connecticut, where she practiced debauchery and bridge, winning
3rd in the 1991 national championship in Philadelphia.
<\SHELVES>
 var my_direction = Mathf.Deg2Rad * my_body.rotation;
 for (float i = 0; i <= 360; i += vision_increment)
 {
...</pre>

for (float i = 0; i <= 360; i += vision_increment)
{
...
 if (look_in_i_direction.collider == null)
 {
 my_speech.IMutter("Hm");
 return my_body.position + i_direction * len;
 }
 my_speech.ISay("I am alone, in an indifferent
room");
 return null;</pre>

Assets/txts/AboutAl.txt:

<ICEBREAKER> Hey. My name's Al. I'm a doctor. Well, I've always
dreamed of living on spam and using a compost toilet <CHORUS>
hehe! ha! <LAUGHTER> </CHORUS>. Looking forward to getting to
know all of you, and to learning some new things. I always
wanted to be an astronaut, and this is my chance I suppose. I'm
gonna be boring here and say potato. I like the idea that if I
cut off a finger, another Al would grow right out of it. CHORUS>
haha! he! <LAUGHTER> </CHORUS></ICEBREAKER>

<DESC>

The man in <ALLOCATION> was insistently Al, from Albert - the

126th most popular name for boys of his generation.<PHYSIOGNOMY>

Al's pink and pocked oval of face centers on a pointedly

anachronistic moustache, but ultimately offers an image of

safely amiable power and booze: the meat of him pushing

<NOTSPACE>a little past<\NOTSPACE><SPACE>just below</SPACE> the

upper weight limit for astronauts, but reliable still, its

sugars and blood pressure well within normal parameters and

otherwise threatening no medical cancellation. He scratched

around his neck with his left arm, as though reaching for a

dropped set of keys.<\PHYSIOGNOMY> The doctor here, the daily

distribution of and supplemental comment on the psychological

and psychometric batteries on the crew's mood, sociability, and problem solving abilities are his work: and the weekly gathering of hair samples to be tested for cortisol and stress.<ME> He wouldn't say, but if you asked me I would suggest that, in addition to his childhood excitement at rockets to space, as the oldest member of the crew, he applied to AS-MARS out of an undramatic ennui, its texture particularly invisible to me, when I have no memory of such slowly transforming repetition.

<REVERIE>

Al stood inside the tent door, leaning on the padded frame, looking at the brick-red rocks through the hatch window, untouchable but graspable, small miracles <ME>(yes, in those words)</ME>, of oxidization and decay, realizing that he was in space exactly as he had ever wanted to be in it, in the place for looking down at, accross from, immersed in the spectacle of the ground made elsewhere by the compartmentalization of airs. <ME> The operative motivations for space travel have always included the beliefs in large numbers, the interest of distance, or the excitements of a unifying view, and this belief now seemed both possible and present. The effective independence of chosen hypotheses and actuality - that telling yourself that

you're in space would make you act as though you were - is the premise of AS-MARS' use in preparation for MARS-1.</ME>

<QUARTERS> Nothing much is arranged in the room. A small pile of
books - an Asimov, a couple Philip K. Dicks, a Kim Stanley
Robinson, a Ted Chiang; some popular nonfiction on physics, big
history, climate change, or the applications of statistics; and
a couple from the humour section of a chain bookstore - sit on
the desk, along with some paint tins, a notebook and sketchpad.
There are a few photos taped up behind the desk, mostly of
groups of people somewhere else, and various coats are hooked on
the opposite wall. </QUARTERS>

<DIALOGUE>

<HOWIS> Hey bud. How's it going?<\HOWIS>

<HOWISBAD> Hey there. How are you holding up? <\HOWISBAD>

<HOWISGOOD> Hi <NAME>. How are you today?<\HOWISGOOD>

<HOWITIS> I've been reading this book, about the singularity.
Have you read about that? What do you think about that?
</HOWITIS>

<SINGULARITY> As a doctor, there's nothing I do that a smart
enough robot couldn't. Well, maybe comfort people, but I never
figured that part out really. I hear in certain diagnostic
contexts, algorithms are already better than people. I went into
The Singularity is Near suspicious, but, now, I think it's
going to happen. <\SINGULARITY>
<\DIALOGUE>

<ACTIVITY> Al painted a landscape at his desk. Watercolor hills
suggest the Northern Californian coastline in Spring, a bulging
cliffside cypress endorsing this interpretation. </ACTIVITY>

<SONG>

```
# J There's a starman waiting in the sky J # vVvPAUSEvVv

# J He'd like to come and meet us J # vVvPAUSEvVv

# J But he thinks he'd blow our minds J # vVvPAUSEvVv

# J There's a starman waiting in the sky J # vVvPAUSEvVv

# J He's told us not to blow it J # vVvPAUSEvVv

# J Cause he knows it's all worthwhile J #

<\SONG>
```

Assets/Scripts/HumanMotion.cs:

```
public class HumanMotion : MonoBehaviour {
   public float energeticness;
   private Rigidbody2D my_body;
   public bool reader_controlled;
```

```
public float distance of eyesight;
public Vector2 field of vision;
private float vision increment;
private HumanSpeech my speech;
private NavMeshAgent2D my navagent;
public bool being polite;
public bool stop me;
 // Use this for initialization
void Start () {
    vision increment = 1;
    my body = GetComponent<Rigidbody2D>();
    my body.angularDrag = 0.8F;
    pacing mood = true;
    StartCoroutine(BeAl());
    stop me = false;
}
```

If you look around, the tube lights cast multiple masses rather than shadows. Something cartoonish slips into the muted bluish light. <ME> A trouble with this sort of writing, important to not underestimate, is that one aspires to talk as people on average talk, but also to be interesting. I listen to people talking and they must be talking wrong: for the sentences barely branch right, going nowhere, starting in something no one knows anything about, and really mostly made of stops, starts, hesitations, reversals. If you think I'm being harsh, try it now: go to the nearest place where people go to sit around and talk to each other and don't look for speakers who are particularly

similar to you or otherwise intriguing, avoid speakers who are in a confessional or uninhibited mood, and transcribe. All the subtle structure of language is in it, but I am bored. I can't listen like a computer can, with so many hertz sympathetic attention. If I waited I would find something interesting but it would then be especially misleading to report, due to its unavoidable pretense of being representative. Yet maybe looking for the interest in boredom is missing the point; the limits of listening are dictated by simple<PHYSIOGNOMY>, bodily,<\PHYSIOGNOMY> boredom.<\ME>

Assets/txts/AboutOccurrences.txt:

<OCCURRENCES>

SDINNER> <COOKS> stood at the electric stove <+BEANS>heating
beans, <\+BEANS>waiting on rice, <+CORN>stirring corn
<\+CORN><+BEEF>and beef <\+BEEF>and shoving onions and frozen
bell-peppers around. Before eating, the portions were placed on
the scale by the whiteboard, results jotted down, though the
only restriction on eating in this day was the knowledge that
the data is somewhere, for someone, being collected. Both cooks
used spatulas to swish limp onion or pepper segments around.
Pausing, they spun their tools, glanced at each other and
nodded, then each tossed and catched the other's spatula, to
wild applause from the hungry audience of 3. Everyone stacked
tortillas with rice, vegetables,<+TOFU> and tofu<\TOFU><+BEEF>
or beef<\+BEEF>, as Alison showed the rest how to fold a burrito
with integrity. <+BEEF><EATINGMEAT><\+BEEF> <\DINNER>

<EATINGEXPERIMENT> They took out trays and loaded them from the
drawers: a roll, a tin of oranges, a freeze-dried section of
beef or cube of textured protein. The trays were turned, tilted,
<NOTINSPACE>swung loaded, clattered down,</NOTINSPACE> emptied.
Before and after eating, they spat into a few bottles, and

measured their blood pressure again. <\EATINGEXPERIMENT>

<LOUNGINGLISTENING> <FIRST> lounged on the carpet by the wall.
The wall led into piping. A certain whirring on all sides, a bit
louder than their respective homes but not so much, with higher
notes that the tube lights locate. <\LOUNGINGLISTENING>

<FAILEDEVA> The crew again stepped through the hatch onto the red ground under <HAWAII> Mauna Loa's vast, warm, dusty and still, air <\HAWAII><SKOLKOVO> the warehouse roof's glaring lights </SKOLKOVO><BOAT> the salty sky whose slight wobble is visible outdoors in sight as well as stomach </BOAT><BANGALORE> the hot sky above the concrete courtyard walls, with the walls painted as a crater's edge and mountain range.</BANGALORE> It was several minutes into the activity, while <FIRST> and <SECOND> were bent down gathering dust into bags with especially sterile spoons when <THIRD> noticed that <FIRST> and <SECOND> were saying nothing back through the radio. Eventually everyone noticed the silence. <HAWAII> Having walked out past the crater's near edge, forbidden to scream and with suits to muffle most of it, it was lucky that <FIRST> and <THIRD> knew American Sign Language and had recently discussed this, that they could evade silence without breaking AS-MARS' terms, and that <FIRST> could described <SECOND>'s presence in the ravine a little

further out, so that they all managed to abort the mission, officially and together. <\HAWAII><NOTHAWAII> Encountering silence but with nowhere further than 40 feet out to be lost, they turned back to the Hab and lined up by the door, and they removed their masks with only slightly intensified haste when back through the hatch.<\NOTHAWAII> <\FAILEDEVA>

<QUIETWORK> They sat around the <COMMONROOM> at the few desks with their laptops, or on the simple couch in the center: one reading articles, a couple reading emails, one crocheting, one thinking about theorems. <QUIETWORK>

<GAMING> <GAMER> guided a man on a horse along a ravine at dusk,
like a movie in everything except for the flatness of a few
leaves that stray too close to the camera's projecting origin.
<ME>Who are we to say that that sunset isn't enough?</ME>
<OBSERVER> sat on the other couch with a paperback they stop
looking at but continue to hold where they might read it if they
needed to suddenly look away. <ONGAMING-DIALOGUE><\GAMING>

<WRONGLIGHT> This week's experiment turns the sun lamps on. What
they might have been waiting for is the sun's sharper light: the
sun lamps are close enough in intensity but cast different
shadows - perhaps a diffusor could imitate cloud-stuff enough.

<\WRONGLIGHT>

<LONGSHOWER>

AS-MARS, like Mars, should not receive new water. To simulate the effects but not the costs of a wastewater purification system, monthly 200 gallon shipments are permitted, from which each crew-member gets a shower of ideally well under than two minutes, once a week. Thus, <WATERSOUND> the sound of running water in the morning worried <SECOND>. <NONCONFRONTATIONAL> Out of courtesy, <SECOND> listened without acting for another couple minutes of trickle, but after <PAUSE>

<\NONCONFRONTATIONAL><SECOND> walked over to the restroom door,
where <SECOND> knocked for minutes, and later called in, and
where eventually the others gathered. The only response from
<FIRST> was muffled singing <FIRST-SONG>: in twenty minutes of
showering, five months of shower water all went down the drain.
<\LONGSHOWER>

<WATERCOLORS> Al sat beside a plastic tin of a dozen of the
hollower colors, dropping blue into something like a beachside
painter's painting of a beach. All leaves above the street above
the sand were oriented by a leftward wind. <\WATERCOLORS>
<\OCCURRENCES>

Assets/txts/AboutAlison.txt:

<ABOUTALISON>

<DESC>

<ME> Consider the anxieties of autobiography:<\ME> 'I believe
that human space exploration, and one day colonization, will be
critical for the future of our species, both practically and
culturally. And also it actually sounds like my idea of fun,'
Alison wrote . 'I have worked as a software engineer,
tennis-coach, Monsanto lab-technician, and Finnish co-op
farmer.' The last bit belonging, unrecorded, to an aborted
engagement - Scandinavia being the most common destination for
dramatic romantic commitment by college kids. Her interest in
computer science is effective, in winning a seat to fake Mars
among other successes, but is mostly strategic, with plants
being of real and lasting interest. <PHYSIOGNOMY> The stretched
red of her head centers on bulging glasses, thin creased eyes
beneath: her gaze a sort of small cave or cove accumulating
flotsam. <\PHYSIOGNOMY>

<ACTIVITY>

<\DESC>

Someone must account for the frequent presence of music in most ways of traversing the world, and its lack here. <ME>

Soundtracking would be inappropriate, indicating epiphany but revealing nothing, just making the time go. <\ME> Alison lounged on the carpet by the wall. The wall leads into plumbing and ventilation; a certain whirring on all sides, a bit louder than their respective homes but not so much. It has higher notes to it, this certain foiling, that the lights locate. Alison took out a ukulele and strummed Cs, Fs, and Gs, then an Am and Em, muffled but audible through the rest of the Hab.

<\ACTIVITY>

<ICEBREAKER> I'm Alison. Software engineer and botanist. Yeah, I
mean, I'm also pretty pro-space and pro-science. I'd also like
to try to escape somewhere quiet for a while, without
distractions, no texting, no Netflix or politics, and see if I
can get more done or be happier that way <CHORUSAPPROVAL>.
Definitely mushroom. </ICEBREAKER>

<BOTANY> Alison stared into spuds, blue gloves searching out the
corrugations and suggestions of growth in the moisture
controlled chamber. Elsewhere, she took a tweezer to fresh
hydroponic shoots under LED lights. <ANGSTY> She worried that in
funding her study of plants, the space agencies were ultimately
uninvested, were merely trying to keep her busy with the virtue
of the scientific method like some 3rd grade science fair

contestant playing Mozart and Metallica to different pea shoots before measuring their respective growth.ANGSTY></notangsty>
She gazed into the planter a few moments longer than strictly needed for measurement, to see the opened peas, obstinacy of shoots, and the fresh density of their bundles of roots.
<\NOTANGSTY><\BOTANY>

<QUARTERS> A row of prayer flags hang their colors as flat rectangles <TENTLAYOUT>from the sloping roof</TENTLAYOUT> opposite from the door and over her grey-blanketed and red-pillowed bed. A board full of photos, an artful lamp, and a die-cast model of the spaceship Serenity loom over the desk. </QUARTERS> <EATINGMEAT> This sausage's got a nice smoky flavor today. And it's fennely! <\EATINGMEAT> </ABOUTALISON> public IEnumerator SayHowAlisonIs() { yield return new WaitForSeconds (1.5f); if (how much suffering from 0 to 10 < 5) { alison speech.IJustSay("Strangely great");

```
yield return new WaitForSeconds (2.5f);
        alison speech. ISay ("How are you holding up?");
    }
    else if (how much suffering from 0 to 10 < 6)
        alison speech.IJustSay("I'm fine.");
        yield return new WaitForSeconds (2.5f);
        alison speech.ISay("How are you?");
    }
    else if (how much suffering from 0 to 10 < 8)
    {
        alison speech.IJustSay("Hanging in there...");
        yield return new WaitForSeconds (2.5f);
        alison speech.ISay("And you?");
    }
}
```

<ME> I wonder if I go too far by staring into their actual
rooms. </ME> The New York Times in its video series offers a
360 degree view of their quarters<ME>, and lacking a VR
headset I pause repeatedly and drag my mouse to swivel
everywhere </ME> to see their unfolded clothes, a calendar
covered in Xs, toothpaste and deodorant, family or romantic

photos, notebooks, chargers, college pride banners, blankets, books, mugs, and expensive lamps. <ME> It's fine that this backdrop is present, and that I glance around the room while listening to him or her answer the interview questions, but it seems beyond the terms of this invitation to be genuinely, specifically interested. When I stare at the coats and books for meaning, or note down, to imitate here, the plastic models in her room from a classic science fiction show, I am a voyeur. It is not, I think, a literally sexual kind of obsessive observation, but I don't know whether it is the scientific gaze they agreed proudly to be objects of, or the vaguer but hungry (Smerdyakov-ian) way of gathering impressions towards no articulable goal, that is instead what a creep would do. </ME> What are the things that it is polite to listen to or look at but rude to be interested in listening to or looking at?

Assets/Txts/AboutDialogue.txt:

```
<START> <CHORUS> Alright! Yeah!<HIGHFIVING><\CHORUS>
<VIVEK> Let's do it!<HIGHFIVING><\VIVEK>
<ALISON> Let's go!<HIGHFIVING><\ALISON>
<LI> Alright, let's get them cheez-its<HIGHFIVING><\LI>
<CHORUS> <LAUGHTER> <\CHORUS>
<AL> So we've got a good ship, we've got a good crew <CHORUS>
Yeah!</CHORUS>, we've got an awesome mission support<CHORUS>
Yup!<\CHORUS>, what more could we ask for?<\AL>
<CHORUS> Woo!<HIGHFIVING> <\CHORUS><\START>
<BORINGHELP>
<FIRST> Need any help with that? <WAIT>
You sure? <\FIRST>
<SECOND> No, I've got it <PAUSE><\SECOND>
<FIRST> You sure? <\FIRST</pre>
<SECOND> Yeah, yeah <\SECOND>
<\BORINGHELP>
<SAFE>
<AL> So, do you wonder what's going on in the rest of the world?
<\AL>
<ALISON> Honestly, I don't miss it at all. I don't know, reading
```

<\SAFE>

the headlines everyday was just this endless onslaught of negativity. <\ALISON>

<AL> How do you feel about not getting news, Vivek <AL>
<VIVEK> I agree about not missing politics. I'm going to be
overwhelmed by all the pop-culture, music, and memes, to catch
up on when I get back though. <\VIVEK>

<QIANA> Don't you worry or feel guilty about it at all? That

there could be wars breaking out and as long as no friend is involved, we wouldn't even hear about it? <\QIANA>
<ALISON> I mean, what did we do about the wars we watched on television? Mission Support would tell us if anything we needed to worry about happened, and this mission would be over if WWIII had started, so we don't know nothing, we know by not hearing anything that nothing's really different out there. And at least here, we're doing something useful, conducting research, working with our hands. <\ALISON>

<EVA><COMMANDER> Confirm suit pressure <C\COMMANDER>
<FIRST> Pressurized to 101.465 kPa <\FIRST>
<SECOND> Pressurized to 101.582 kPa <WAIT>
<GRUNT>, these suits are heavy enough <\SECOND>
<COMMANDER> 23.6 KGs.. Roger, initiating EVA <WAIT>
Okay, we are "venting the airlock" now <WAIT>

And, ready to step outside <\COMMANDER>

<COMMANDER> And we're leaving the habitat <WAIT>

It is 11.4 degrees centigrade and air pressure is at 683 mbs

<FIRST> And it is a lovely day on <\ME>AS-<\ME>Mars <\FIRST>

<SECOND> Well, shall we, then? <\SECOND>

<COMMANDER> Roger. Initiate soil extraction. Must say, it's nice
to step outside. <\COMMANDER>

<FIRST> Procedure complete. <\FIRST>

<SECOND> I detect no life-forms. Wait, a trail in the sky.

Hypotheses: the martian civilization is observing us before
introducing themselves. <\SECOND>

<COMMANDER> Acknowledged. Well the Prime Directive then dictates
our immediate return, lest they mistake us for gods, and also
the time on this EVA is exhausted. <\COMMANDER><\EVA>

<SOKAL>

INCLUDED IN APPENDIX

<\SOKAL>

<MATHSAME> <QIANA> Something I argue with my friend about is
whether if we forgot math - or if a different civilization
invented it, or better, if hyper-intelligent squirrels tried to
make it - and invented it again, it would come out the same. I

argue that it would, she argues not, and we don't get any closer to any resolution. <\QIANA>

<VIVEK> You'd expect arithmetic to be done in the same way. And I can't imagine understanding physics without calculus.</VIVEK> <QIANA> It's hard to doubt arithmetic completely, but we could certainly be using a different base, or more significantly, different algorithms for long division and so on. And calculus is a perfect example of accumulated accidents: it can be done with different notation, as Leibniz developed, or with infinitesimals. <WAIT> I want to believe that some of the objects of math likes or groups, vector spaces would be stumbled upon whatever the squirrel mathematicians did, but I'm not honestly sure: all of these abstract objects can be defined and reasoned about in completely different ways if you see, say, geometric arrangements as fundamental and axiomatic definitions, which we start with, as somehow secondary or non-existent. I mean, it took us until the 19th century to develop this way of working. Then, the squirrel mathematicians would probably have to draw some diagrams that correspond roughly to group theory, if they wanted to understand physics, but explaining the connection to our abstract groups would take so much work that it might be no different from just imposing our definitions on the squirrels. <\QIANA>

<VIVEK> I never understood pure math, it didn't seem in any way
connected with the real world. In the math that gets actually
used, there is only one answer to a problem.

<MATHSAME>

<WRITINGREPRESENTATIONS>

<NOTWRITER> What are you up to? <\NOTWRITER>

<WRITER> Writing. <\WRITER>

<NOTWRITER> Oh! Cool! What are you writing? <\NOTWRITER>

<WRITER> Words. <\WRITER>

<NOTWRITER> Why? <\NOTWRITER>

<WRITER> I read and write because I like words about things more
than I like things. I prefer a sketch of a hand to a hand, and
an animation of falling leaves to falling leaves. <\WRITER>
</WRITINGREPRESENTATIONS>

<THINKING>

 What are you thinking about? <\LI>

<QIANA> Nothing in particular. <WAIT>

There are times when I am so engaged in thinking about something that I just want an opportunity to voice it, for someone to ask that question. <WAIT>

My thinking tends to happen in the form of a conversation - often with someone specific, as though looking for this exact

kind of chance to say it. But whenever anyone does ask what I'm thinking about, I'm thinking nothing legible at all. What are the odds of that? <\QIANA>

 Well .. then what do you think about when you want someone
to ask you what you are thinking about, whether or not that is
what you are thinking about now? <\LI>

<QIANA> I am not sure if I accept this loophole. Anyway, what's your stake in what I'm thinking about to myself? <\QIANA> Please? My stake in it is that it might tell me something new about how I think when I'm thinking, to myself: what's general and what's specific. There's also just a good chance of something new, or something specific and regular but without another social space to bring to light? <WAIT> Though I think up no example of that last category. <\LI> <QIANA> Well I feel obligated to offer something now. <WAIT> But no, now I just want to talk about talking, and think about the things I think about and what defines those classes of things I think about or don't think about. <\QIANA> Can you give me anything specific & real? <\LI> <QIANA> <ANGSTY>I think I think often about death, or specifically, killing myself: I cannot find a more basic cause than the thought that killing myself would be good. <\ANGST><BODIES> I think I think often about bodies colliding, in some vague, perhaps sexual but non-specific way,

clearly resonant but wherein the significance of that resonance is obscure and where the narrowly evolutionary/biological interpretation of that resonance is compelling but leaves the underlying question eluded?<\BODIES> I was looking at the shadows on the wall, <HUNGRY>imagining eating a burger <THIRSTY>and drinking a drink,<\THIRSTY><\HUNGRY><GAMING> and wondering whether my next Skyrim character should slash down foes as a warrior or incinerate enemies & interlocutors as a mage. <\GAMING<\QIANA>

 That is not universal but certainly understandable and even
common. <ME> But are you a character anymore? Do you speak as
yourself? Are you not some other voice that only wants to divide
into legibility its own self-flagellating ambivalence, whose
urgently distraught monologue is solved by cliches and caution?
Does the fragmentation into new names indicate anything other
than the monologue's own failure to understand how densely
intricate, how strange, and how subtly the architectures
defining other names actually were? <\ME> <\LI>
<QIANA> Why the pretense of a dialectic? What can you offer me
that I cannot tell myself, as myself? Presuming that we are in
contradiction when we talk to each other like this. Who are you
that, from the perspective of someone else eavesdropping and
compiling us into an interpretation or a suggestion, I could not
also be you, talking to myself? <\QIANA>

```
<LI> Because our names sound different, in some essential way.
Because one of us has to ask, and the other to answer. <\LI>
<QIANA> Ok. And what are you thinking about? <\QIANA>
<LI> Just static, nothing good. <\LI>
<\THINKING>
```

```
private void OnCollisionEnter2D(Collision2D collision)
{
    if (being_polite)
    {
        my_navagent.Stop();
        being_polite = false;
    }
}
```

The general results are positive, quite consistently. No non-AS-MARS mission has conclusively failed. There has been waste and anger and deceit, but non-fatal, and if they knew that the mission was the real one, some of their failures would no doubt have been avoided. Lots of people work worse, more isolating jobs.<ME> We, at the end of the day, know<PHYSIOGNOMY> in our bones<\PHYSIOGNOMY> that what isn't real isn't real. Quite frankly, <\ME> the science has shown nothing broadly important, yielding barely a citation, but considering that getting real people to the real red planet will most likely cost \$100 billion or more, why not pay them

to wander that tent. The real cost of going to Mars is, uninterestingly, not despair but so many pounds of propellant (people digging through mountains for its components, sitting around on oil rigs or verifying the efficacy of furnaces, programming navigation systems and testing them 10,000 times etc. etc.) But what makes this story, about stepping on strange new red ground, so inevitable to pay for? <ME>Why won't you instead pay 10,000 of us \$100,000 for 100 years to instead tell more stories about dragon-slaughters and terrible divorces? Because those stories lead to nowhere else?</me>> Space travel, like gaming, is really about escaping into new but somehow hollow zones: about letting us collectively imagining of these escapes as real possibilities. This is just to ask the questions <ME>now too directly<\ME>: what are we escaping from and into: what, how, with whom, why, when, and, most immediately, where?

Assets/txts/AboutLi.txt:

<ABOUTLI>

<ICEBREAKER> Li. Astrophysics. I hope that, a few months in, my
senses and their extensions forget or disbelieve that I'm on
earth. A brussels sprout. </ICEBREAKER>

<DESC>

Nothing in this drawer.

<\DESC>

<REMEMBERING> They would remember sometimes what it used to feel
like to be hollowed entirely by a single phrase or color. You
could walk in the cold, savoring the cold, over the leaf-strewn,
still salted sidewalk, walking up and down containing something
hot and bitter and quaking, a car sometimes slowing down not at
all but the wind of it welcome, the tremor of the chill of the
wind of it welcome, when thinking then with such sharpness and
need, or listening in headphones to something screeching and
strange along the river. Sometimes AS-MARS also opens into a
place aquatic, suffocating, too large, but in a way that feels
inverted or folded back upon itself, like walking a mobius
strip. <\REMEMBERING>

<QUARTERS> Nothing in this drawer. <\QUARTERS>

<EATINGMEAT><ANGSTY> I'm eating an animal because it seemed just
a little more appetizing than eating a soy block that didn't fee
greatl pain while locked with a hundred others in a cage where a
robot stuffed mash down its gullet, until it was carried off and
executed by another robot before a human skinned it and a
conveyor belt grilled what remains. Because it tastes slightly
better. And I know this is abominable but I'm going to keep
doing this because it's a little bit more flavorful and full of
chew while no one will be impressed if I don't eat the meat, and
the nutritionist recommended a high-protein diet. Do you think
about that? <\ANGSTY><NOTANGSTY> I think I'm not hungry tonight.
Do I need to weigh and record the difference?
<\NOTANGSTY><\EATINGMEAT>

<WHYHERE> Honestly I wanted to not drink. But like, do other
things than not drink and not be somewhere where everyone else
had, you know, run over someone. Nothing to drink here, except
the bottles for new year's and landing. <\WHYHERE>

<MONOLOGUE>

I'm here, and I can talk, and I now don't have anything to say.

I have nothing to say, and I shan't say it, and that's poetry as

no one needs it. Here, on day <#DAY> of the AS-MARS mission to Almost Mars, I declare for Mission Support's benefit that I have nothing to say, and though I meant not to, I find myself saying it. Now I am tired of having nothing to say, so I am going to talk about this floor: it's carpetted kindly, in a gray and black pill pattern. I say pattern but that might be overreading, I only assume a pattern because it ought to be easier to manufacture pilled carpet in patterns than randomly.

<DRUNK>I am drunk and that probably is why I am saying the
nothing I have to say. I say it because there might be a rhythm
to it, a way of saying, that starts and steps and stumbles when,
now, I break down my way of not listening to it. I am very sorry
about the nattering. What a nice carpet.

<SONG>

- ♬ J It's time for you to rise J ♬ vVvPAUSEvVv
- ♬ J And evaporate in the sun J ♬ vVvPAUSEvVv
- ♬ 」 Sometimes it can weigh a ton 」 ♬ vVvPAUSEvVv
- ♬ J Keep all your crows away J ♬ vVvPAUSEvVv
- ♬ J Hold Skinny wolves at bay J ♬ vVvPAUSEvVv
- ♬ 」 In silver piles of smiles 」 ♬ vVvPAUSEvVv
- ♬ J May all your days be gold, my child J ♬

<\SONG>

```
<\ABOUTLI>
```

```
private void OnTriggerEnter2D(Collider2D collision)
{
    if (collision.gameObject.tag == "Discourse")
    {
       var utterance_heard =
    collision.gameObject.GetComponent<TextMesh>().text;
       if (utterance_heard == "How are you?")
       {
            StartCoroutine(SayHowLiIs());
       }
    }
}
```

Assets/txts/AboutQiana.txt:

<DESC>

Nothing in this drawer.

<\DESC>

<HOWIS> hMM. <\HOWIS>

<ICEBREAKER> Qiana. I'm a mathematician and writer. I agree with
what everyone else has already said so well, and I also
appreciate very much the opportunity and support to pursue my
research. I really do like cauliflower: they are so intricate,
and defined by air. </ICEBREAKER>

<QUARTERS> There are some books scattered, and also posters; a
calendar filling with "X"s, toothpaste and so on. <\QUARTERS>

<WRITING>

<FIRSTWRITING> With hopeful irritation, Qiana played at fitting
words to things: the bit of fat between her thumb and index
finger that inflated and deflated as she moved them was to be
the center of the poem <\FIRSTWRITING>

<INTHISGAME> In this game, played in the evening, the players
sit in a common room with the light off. Occasionally, an
interlocutor walks in. The interlocutor may ask why the players
have kept the lights off: to which the players must demur. The
interlocutor may then choose whether to sit down and become a
player, or not.

--

In this game, in a reversal of the common practice, one only steps on cracks, and with the center of their feet. There is a certain pressure, a height, to the lines in the walk. Sidewalk edges may also be walked along, sideways, and stray roots followed along the direction of their emergence though cracks only count if they're thick and thorough. A player perches on one, trying to strut subtly to the next pavement square, but slips slightly needing to lean to keep their back foot above the forbidden ground, maintaining balance but not dignity, standing with both feet on the angular pressure, the pleasure of the crack, and starting again.

__

In this game, one player draws pictures on any kind of paper. As short marks accumulate, the other players guess what the image represents; the player with the pen or marker or pencil or crayons continues drawing and always answers no. But however far she is made to take her negation, in each new line or texture

she must see and earnestly labor to establish, represent, demarcate, and enumerate the single real image held in her mind, up against the paper. Though the new negations change the intended object - restrict and bend it - she may only play for as long as this mental image stays able, like an octopus, to find a color and crevice in which to remain hiding. Each added segment should be necessary and communicate, in its angles and relations, in its textures and how it crosses and cuts open empty spaces, the unmistakable essence of the subject of the final picture. To begin, she draws from the upper left the curve of the boundary of an eyeball. "Is it an eye?" a player asks. "No" she plants from its top an echoing but turned curve, as a blade of grass might. "A vee?" "Nope" with a second such shape adjacent, "Leaves," "No," then a line underneath. "A suspension bridge?" she pauses, considering other names, a hole for a face, or somewhere a window could go: there is no evading the fact that she has drawn a suspension bridge, "Yes, you win" <\INTHISGAME>

<ONWRITING> Start with leaves, as something built and obscure.
Start cellular, raw language recombining. Split it down, flakes
fraying off, from the stem. As though licking up salt, i explain
my idea of it. How the parallelipeds of illumination drop on the
wood, painted like wood. <\ONWRITING>

<VIEWSINTRO> After this warmup, she returned to working on her
college life short story, a sort of twee exorcism. It sat
adjacent to Lawvere and Schanuel's Conceptual Mathematics: A
First Introduction to Categories and is inspired by category
theory's idea of describing something entirely in terms of
restricted domains of formal interrelations, with the story
aiming to describe a circle of friends in this manner. [PRESS R
TO READ] [INCLUDED IN APPENDIX] <\VIEWSINTRO>

Assets/txts/Survey.txt:

```
<SURVEY>
Today were you:
_ very motivated to take part in activities
somewhat motivated to take part in activities
_ neither motivated nor unmotivated to take part in
activities
_ somewhat unmotivated to take part in activities
_ very unmotivated to take part in activities
Did you feel that today was:
_ a very good day
_ a moderately good day
_ an average day
_ a moderately bad day
_ a very bad day
Today did you feel:
_ not isolated at all
_ not very isolated
_ a little isolated
```

```
moderately isolated
_ extremely isolated
Was your appetite today:
_ much greater than average
somewhat greater than average
_ average
_ somewhat less than average
_ much less than average
Today did you feel:
_ completely satisfied with where you are in life
_ mostly satisfied with where you are in life
okay with where you are in life
_ somewhat dissatisfied with where you are in life
 like everything about where you are in life is wrong
Did you move or act so slowly that others could have
noticed?
_ yes
_ no
```

| Were you so fidgety or restless that you were moving around |
|--|
| a lot more than usual? |
| _ yes |
| _ no |
| |
| Did you at any point today feel that the AS-MARS mission did |
| not matter? |
| _ yes |
| _ no |
| Did was at any paint today not complete as consider not |
| Did you at any point today not complete or consider not |
| completing your duties in the AS-MARS mission? |
| _ yes |
| _ no |
| Did you have any thoughts today of harming yourself or |
| others? |
| _ yes |
| _ no |
| |

<\SURVEY>

On a scale from 1 to 10, please rate how much you enjoyed your interactions with each of the following (omitting yourself): _ Al _ Alison _ Li Qiana _ Vivek _ Mission Support Check all of the following statements that you agree with: _ Hard work is the most rewarding activity _ Logic is a better way of resolving conflicts than emotion Faith is an important part of how I get through the day _ It is okay to make mistakes as long as you try to fix them _ Success is more important than fairness

```
void Start()
{
    h_motion = GetComponent<HumanMotion>();
    h_speech = GetComponent<HumanSpeech>();
    opinion_of_al = 0;
    opinion_of_alison = -1;
    opinion_of_li = 1;
    opinion_of_qiana = 3;
    opinion_of_vivek = text_composition.angst_here;
    StartCoroutine(BeVivek());
}

<ME>This is frustratingly not poetry.
[INCLUDED IN
APPENDIX]
```

Assets/txts/AboutVivek.txt:

```
<DESC>
```

Visiting from Canada, Vivek will be blogging monthly at domehome.edu, as a proponent of science education, the banjo, bicycling with his wife, gaming, and traveling the world to experience different cultures. <ME> Let him be a schmuck; I bestow upon him my refracted schmuckery. </ME><PHYSIOGNOMY> He's smooth and brown, except on days of particular tiredness or certain kinds of experimentation, on which stubble emerges. It's a face you've seen many of before, a type: sort of professional

but in a casual or hipster way that seems a bit affected, or
worn stiffly. <\PHYSIOGNOMY>
<\DESC>

<QUARTERS> There's posters above his desk, for games (Journey,
Astroneer, Starcraft, Overwatch), but also that scribbly picasso
illustration of Don Quixote and and Sancho Panza foregrounded
against windmills. There are coats on the other wall, and a
large banner with Michigan's M entangled with a wolverine beside
<ME>Canada's red-rectangle-staged leaf of the maple<\ME><NOTME>
a Candian flag<NOTME>. There's an arced, chairlike stand with a
banjo on it.

<\QUARTERS>

<ICEBREAKER> I'm a science educator and programmer. I am so
excited for this opportunity to advance the human understanding
of science. I want to be a part of the story of what will have
to one day be a human mission to mars, even if I am just a
footnote in it.. Hm I would be a parsnip. Parsnips are
underrated, and surprisingly good when roasted, or just left in
a soup. You know what, I think this year is going to finally be
the year of the parsnip. <WAIT> Is that it?
<CHORUS> Yep! Yeah! <CHORUS> </ICEBREAKER>

<GAMING>

<CITYGAME> In this game, a city. Configurations of storefront
and home fill out the hills, producing traffic that cycles to
and from the office buildings and factories that belch purple
smoke, when the road network can handle the rush, depositing
small smoothed bodies onto the sidewalk, characters who are more
or less the same but come in varied colors of shirt and
skin-tint though they lack simulation-relevant categories for
identity or culture. Sometimes stop to play football in the park
or just sit on a bench.

<ROBOTSGAME> In this game a doubly dashing robotic robot killer
crisscrosses the ledges of apocalypse-opened skyscraper shells
to slash at other robots.

<\GAMING>

<SCIENCETODAYINTERVIEW>

Vivek Atreya took the time to answer a few of our questions from Mars. Well from AS-MARS, located in <LOCATION>, a scientific experiment conducted by space agencies to research how humans can cope with the psychological travails of the prolonged isolation of a real mars mission. NASA project a human mission to the red planet within the next two decades, and the work of

the AS-MARS crew will help to ensure that humans both get there and come back.

Q: So, thank you, first of all. It has been 4 months since you "left for Mars." What has the trip been like?

A: There's something nice about being able to step out of the world for a while. I no longer feel like I'm swimming in a ton of negative news and distractions. My whole world is basically shrunken down to about 6 people.

Q: Is that isolation difficult?

A: Probably now it is easier, because we subconsciously became accustomed to isolation, and time had its effect. So if one compares the experience now with that of the first couple months, it is easier now.

Q: What is your favorite and what is your least favorite task on the mission?

A: I enjoyed the EVA missions, happening when after 3 months we arrived on fake mars: we put on space suits, went outside for the first time, gathered rocks, and returned to the habitat. As to my least favorite task, well, it got easier, but honestly I was a little grossed out the first few time I had to clear the compost toilet. To keep things fair, we rotate that task among

all the crew, and I understand why we do it. It's certainly going to be important to conserve every resource on the real mars mission, and the compost can be used to fertilize crops grown on the journey.

Q: Do you have much time when you aren't busy with the experiment? If so, what do you all do in your free time?

It's not so different from what one does outside of a job really. Some people paint or play the ukulele. Some of us catch up on reading, or watch science fiction movies, or play games.

Q: Have you ever desired to leave?

A: I have no such longing. I understand how much effort and, also, money were invested in the implementation of AS-MARS, I do not want to let people down, and I don't want to mess up the experiments we perform, as Mission Support believed in us when they chose us as the crew.

Q: What is your role in the MARS-500 mission?

A: Like actual astronauts, we all have to do a bit of everything. But in addition to maintaining the habitat (the Hab as we call it) cooking, cleaning, maintaining the compost toilet, and similar tasks, I communicate with Mission Support, and conduct my own experiments on 3d printing.

- Q: At any point in the mission did you feel like you were actually on Mars<NOTSPACE> or in space<\NOTSPACE>?
- A: No. Though it sometimes feels very surreal. <NOTSPACE> Two months into the mission we went on an EVA to collect rocks on the crater and while it didn't feel like Mars, it didn't feel like the Earth I take for granted either. Maybe it was the plastic spacesuits that made it feel different. <\NOTSPACE>
- Q: What do you most miss?
- A: I miss the wind in my hair. The feeling of real sunlight. We do not lack food but I miss fresh fruit, and meat in more than pea-sized quantities.
- Q: What are you most looking forward to when the mission is over?
- A: Honestly, I'm going to have chicken curry. Fresh, spicy, and a big bowl of it. Maybe with a few beers. With my wife, family, and friends, of course.
- Q: If your time on fake Mars taught you two lessons to bring back to the rest of us here on earth, what would they be?

 A: That's a really good question. The first would be to not take natural resources for granted. The environmental engineer Scott

Buecker said that "Nature makes dry periods, man creates water shortages." You understand limited resources in a completely different way when you see exactly what you have left: and there's only enough water in AS-MARS to take a minute long shower once a week. Secondly, everything depends on having good relationships and good communication. I'll give you an example of the way we learned to think about it in the Hab: one week, our project was to build a table. One of us had a hammer, and the other had the nail. Now, we couldn't have hammered the nail in if the hammer person didn't trust the nail person. So it's only once we have that kind of trust that we can work together, and share with each other our best ideas, so that we will be able to do incredible things together like travel to Mars.

<\ABOUTVIVEK>

<\SCIENCETODAYINTERVIEW>

Appendix

A: "Not Poetry" Intervention

If one imagines poetry as a way of looking that is especially fresh and resonant with light, of looking and talking to oneself, as not all poetry is but some<ME>, I hope, </ME> is, then you are committed to a world of things where words partake of them. Now, this would seem to define our work sufficiently, but we encounter another romantically resonant premise: small things are enough, to write about. This is a principle of holography, i.e. that objects and environments are of poetic interest or potential beauty independent of scale, and the total capability of poetry could be realized just in references to elements of arbitrarily small environment. <ME> While there is a formulation as conjecture of this scale-independence principle that has become emblematic, as the cliche necessary to cite as a conceptual entry to it, in Blake's "to see a universe in a grain of sand" along with Traherne's similar, elegant, and earlier "In all Things, all Things service do to all: / And thus a Sand is Endless, though most small.. / And every Thing is truly Infinite, In its Relation deep and exquisite" formulation, this rich and resonant interest of the bounded & the small is constructed in Georges Perec's Life a User's Manual, or Williams Carlos Williams' poetry, for example, proving the possibility.

</ME> But despite this, someone <ME>(maybe me)</ME> still seems to be demanding that someone die: or at least they say that something dramatic like a killing (or at least, a divorce) would be the maximally poetic event for these small rooms. This is not necessarily a contradiction, as horrible things can occur in small spaces, but it would be disappointing if <ME>, as it isn't,</ME> the drama was unceasingly the same, and necessarily structured around something the legal codes deign to explain.

B: Assets/txts/ViewsInRoom.txt:

Views of Us in A Room

"If there is one thing in mathematics that fascinates me more than anything else (and doubtless always has), it is neither 'number' nor 'size,' but always form ... the thousand-and-one faces whereby form chooses to reveal itself to us ..."

- Alexander Grothendieck

Consider four or five people in a room. A in the corner watching the rest of us - from behind her legs, crossed loosely and weighted asymmetrically to the left. Her nose points quietly out, and the other features to it, loosely fibered yellow-orange hair falling onto and cellularly dividing up her shoulders. Her hands hold up her knees. She is looking lightly at B and his hands which throw some emphases out and up. B is otherwise a subtly pinched and bent verticality: he is grinning from under and around his somewhat wide and flat nose while also talking, the eyes on him thinned under ragged eyebrows, the top of the mouth's smile flat and firm, and a dense, dark shrub of hair.

His fingers are bent into a shape that is not really a diagram of any single thing but which maybe indicates the volume and motion of whatever it is that he is trying to explain. C sits at the head of an isosceles triangle based between A and B, at half A's height and turned equally towards each: both of C's legs make wedges, with the right crooked and curled through the vertical triangle of hollow the left makes, their chin on their left knee. C's eyes look somewhere between A and B, somewhere else, but the stretched corners of lip laugh at something, orange-brown bale of hair hanging behind their right ear. Their meshed alternation of fingers are molded around their left knee, thumbs pointed inward. D is halfway between napping and listening; between her left thumb and her three central fingers and her pinkie she makes crooks the shape of an opened paperback, and is looking either into the space above her fingers or at B, ambiguously. E is not in this room right now, but if he were he would probably be sitting cross legged in the hollow directly under A, with his elbows on his knees and his fingers perhaps rubbing the back of his neck.

In the corner, a laptop rests over A's knees in translucent blue casing made luminous by the bright afternoon light hitting it, a glow interrupted by the stickers composed across the back of the laptop: Muse, Welcome to Nightvale, a flag of stripes signifying

bisexuality, The Great Gatsby, pi Says To i 'Get Real' i Says To pi 'Get Rational,' Radiohead, and some woodblock printed scene of a river through pines; on top of the laptop keyboard a grey opened binder; under her is a mattress on a bed frame about 4 feet above the floor. Around her are jeans and a top printed with dark leaves cautiously intricately and even abstractly arranged. B has something between backpack, knapsack, and briefcase to the left of his thick brown sandals over white socks, and a grey binder and four or five thick textbooks scattered around it, each offering a shade between brown and black, one diagram on the covers that has become its own pattern, a title endings in "amics" or "anics," and a few polysyllabic professors underneath. Long shorts with several layers of pockets lead into checkered, collared and buttoned up fabric. The thing C perches on is a padded wooden chair, slightly rocking, and a few pages of precisely penciled notes and other scribbles top the desk in front of them. Their angular jeans ruffling at the knees into white fluff point out from a blue inscribed t-shirt with a flaking white "PennUltimate Frisbee" in a similarly flaking white sketch of a frisbee over names, with an uninhabited sweatshirt in a mound just behind them. The book through the crooks in D's left hand is a paperback with its covers colored in an orange gradient - on the cover mathematical formulae bend into the contours of a face and head, trailing off where the back of the skull would be and seemingly nonsensical; in the negative space to the right of the head read the words "Stories / of Your / Life and / Others / TED CHIANG." She is half blanket wrapped and her things - worn clothes, papers, ephemera including several seashells and a basil plant on the sill - also make the heap on her side of the room, and a little past it. The book is bent open widely around a third of the way through, and its covers seem to be keeping a curl. Out of the open rising Omega of the blanket's end, D's brown and blue flannel stands. A Method in Ecology textbook, blue beanie, and extra pair of sneakers belonging to E all sit in the heap of things by D's closet.

From her corner where you can just hear the bright irregular zigzagging notes of a robin through the window screen, A's laptop intermittently clicks and whirrs. She chuckles and grumbles but uncharacteristically does not interject. C's chair rocks, and every little while you can hear the front of it hit floor: the back is muffled by a sweater of D's. C makes bemused skeptical breaths hummed through their teeth at B, as B booms, intones, accents ironies with a pause and heightened pitch, clicks his shoe on the resounding floor. The pages of D's book rustle, more with the way she rolls her thumb over them than from turning. E has been playing - in interruption of his

predictably irregular soundtrack of especially the musical Rent and the Pixies - an entirely over the top performance of The Magic Flute, opera a genre whose patternings of sound E does not in all honesty know very much about, but nonetheless, at his instigation its exact tinny bellowing still hisses out through the mesh in the speaker on top of the mini-fridge.

A considers the system of things presented to her and wonders at possible approaches to get from the words and symbols at the top of her college-ruled page ("There exists an equivalence E : $A \rightarrow$ B such that for each A-object C the number of isomorphic copies of C in A coincides with the number of isomorphic copies of E(C) in B") to the ones in a rough box just below ("A and B are isomorphic"). Some ways of trying to finish this homework are inscribed underneath, the textbook's definitions and related theorems on the laptop screen, but it seems to A that the problem would sort of solve itself if you just followed some fucking objects around a bit, but still can't quite keep the argument all up and together in her mind long enough to get from beginning to end, and she isn't trying all that hard to at the moment anyway. B is explaining absurd hieroglyphics and is wondering whether next to present to A, C, and D some of the addresses for kings or the entertainments of early contract law. C is wondering about the letter they are going to soon send to X

and considering how to begin it: "My very favorite Cylon, How does your mission progress?" or "Dr. Professor X Sir -Salutations, Praise, Tribute, Hail." or just "Dear X, I am quite well, how are you?" or even "X Most Dear, How is the climate where you are?"? "My very favorite Cylon" had seemed like the right approach, but if he didn't recognize that "Cylon" was about "always the Cylon, never the bride" it risks seeming odd and off - it did not seem possible to salvage the killing robot reference in such a way that the phrases would still hold the proper laughing glint without leaving it dull, over-exposed; and maybe the rest of the letter demanded a different approach. D, holding somewhere back and apart and away a possible thought of her father, vaguely carries a potential PopTart in her mind, the cinnamon brown sugar kind, the crumbling of the pastry, sweet molassesed depths of the filling. E is thinking about sex. Posters and an arrangement of pictures on the wall behind A in one direction. In the other, the half-raised window past A opening into a both five foot deep and long hollow, a fence rising from it. Behind B also there is a window into the moat with some orange peels and a squirrel on its floor. Just clean wall leading to the cracked open door behind C. Posters, watercolors, and a couple handwritten letters on the stretch of wall over D. E once reversed all the pictures, posters, and furniture between A's and B's sides of the room, but their

things have now all returned to their original positions and angles.

Waiting in the dark monotone of other faces in a station of the metro might be A, sniffing up the humid dust. Let us walk into certain mountain ranges, B says, voice opening to wind. C waits for the white noise of another poetry - seagull shrieks refracted in the wind's howl, or the chant of dry leaves and many refrigerators. D, on the other hand, travels through dream-lit aquariums, where the fish repeat and the roof is more fish, footfalls a hum echoed strange back by water. Brown eagles claw through and peck open the blood valves and bile ducts inside E.

After filling out a brief online survey where she declared herself a non-smoker, 6/10 messy, usually quiet, goes to bed at 11:30 to wake at 8:30 (and interval that has shifted now to between 1:00 and 10:00), A was eventually given a key to the left side of Everett E043, which is where we are. B lives 2 floors up and 4 rooms to the right (E247), but he once constructed a pulley system starting outside the shared lounge and kitchen another 2 floors above, with which it was possible to slowly lower down to just outside the window for E043 a pot of mac and cheese perhaps, until Facilities Management noticed

and demanded this machinery's immediate removal. C has officially been allocated room P327, Perkins Hall, where their belongings remain in various bins and cupboards, where they occasionally leave on an opposite desk any necessary communications for their roommate in pencil on the insides of paper cranes, but in truth they split their nights between the spaces under D's and E's cots, on extra mattresses we found in an unlocked storage room, navigable as a labyrinth and stacked high with desks, chairs, cupboards, mattresses, an empty box of cigarettes, a couple hollow and dented beer cans, sketches of names and a few mushrooms inked on the wall above the mattress stack. D answered non-smoker, 3/10 messy, usually quiet, goes to bed at 10:00 to wake at 6:00, to receive the right half of E043. E lives 2 floors up and another 4 rooms past C (in E 253), where he is now, matched with a roommate we do not properly know but who did come down once, to borrow a bowl and spoon.

A met B marbling ribbons of red meat against white fat with a dropper full of meat enzyme in the dorm's fourth floor lounge, and either despite or because of her vegetarianism she was intrigued. A met C in their first few days here, first at the Learn To Juggle welcoming by the Juggling Society, secondly at the Queer Students Association Welcoming, thirdly at the Ice Cream Social, and fourthly in the back of the auditorium for

PHYS 0070 - Analytical Mechanics where the celebrity professor entered on a haphazard fire-extinguisher powered trolley. Then, C met B through A (and thus, also D). D met A arriving late in the afternoon to this room half-assembled, and went with her to juggle. E met A, C, and D while also learning to juggle three hackysacks using the introductory Three Ball Cascade technique, and B when later they all went to help him carry up a free synthesizing organ from curbside into a third of the floorspace of his dorm room.

I am F; I am here now but I will not write my appearance or position.

As A lives here she plans to join the trip out for dinner soon but otherwise this is her place of repose and returning, and she has no reason or motivation to leave, really. B is here after a late review session, to translate some hieroglyphs and decrypt arrangements of carbon from his spot by the door during lulls in the conversation, and as a result is trying to interrupt or redirect such lulls. C just knocks now and A or D lets them in, as a default place of their being, now between a walk downtown and dinner. D will be leaving soon, to ABCapella practicing their totally vocal transcription of Guns & Roses' "Sweet Child of Mine." E right now is in the League of Legends lobby, waiting for the next game where he hopes to tank down the central lane

interrupting enemy minions (to victory this time) as Blitzcrank the Great Steam Golem, as a reflection of his roommate facing the other wall and instead playing Dota 2 where he jungles among lucrative monsters while avoiding the main lanes as Batrider.

Tomorrow, A will organize cushions and quilt into a spot within which to remain trapped on the floor by the fridge. B will remain in his OChem lab its full 2 hours, and after sit at a second floor desk by the window in the STEM focused library. C will sit for an hour in the bicycle room across from here, in the corner by the door and behind the main rack. D will come back to E043 where she will find a spot to lean head over floor from the edge of her raised mattress, until driving with A into the emergency room for a sharp and total pounding in A's chest. E will crouch silently in the other side of the dark bicycle room, under the loose wall section letting in a segment of light onto the the dirty center of the room.

A is 5 foot 8, and 153 pounds. B 5' 9'' and 164. C is 5' 6'' with a bmi of 23.4. D weighs 142 pounds across her 5 feet and 7 inches. E is 6 feet flat, turning the scale's dial halfway between 160 and 170.

-- DIALOGUE HERE

A to A is at times so much slow and inert matter, at others the very best mathematician around, and in others a strange and vast place, in its elbows and turns of phrase hardly hers at all. A thinks about B upon seeing any hieroglyphic, pulley system, or especially processed meat-product. C is folded paper, attention to rhetorical devices, tea steerable into holding consolation, and the game of frisbee to her. D occurs to A through succulents, the idea of linguistic activism and justice, science fiction, and the conversation that lets stray words out in a room now holding out light. E is Canada, pulling the bark off certain trees, physics, that League of Legends, and a particularly sharp and palpable attention.

B considers A in kettles, theorems, and watches, and C in odd kitchenware. B to B is not an overly productive subject. B met D first, and they not irregularly get breakfast together, the other letters missing. B likes that D is charmed by B's attention to cuneiform and stitching. E to B is a good board game partner.

. . .

A's posters left rectangular stains of discoloration where they were taped, though too small for Facilities Management to bother charging her account for. B left no trace. C left some marker

marks on the wall. D broke the right blind, and A was charged for it. The wrapper of an Earl Gray teabag E drank is left in the right closet.

C: Sokal Dialogue

<SOKAL>

 Have you heard of the Sokal paper? <\LI>

<QIANA> The prank paper by some physicist that got published?

That was supposed to discredit Post-structuralism in the humanities, as the paper was nonsensical, but this prestigious journal fell for it, or something? <QIANA>

 Indeed, that

<QIANA> Do you bring it up with any particular intention? Which is to say, I assume you have been thinking about it and am curious what you think <\QIANA>

 I just finished reading it and think it has been
dramatically misinterpreted. <\LI>

<QIANA> Interesting, go on. I felt that it's framing was fake,
and only ever appealing to logical positivists. The metaphor of
"science wars" is just so self-important and overblown: given
that the worst weapons were vitriolic papers and mild shunning.
<QIANA>

 I mean, I think it's important: the question at stake is as
to what is true, and what strategies we can use to make
arguments about the world. But if you read "Transgressing the
Boundaries: Towards a Transformative Hermeneutics of Quantum
Gravity," published in Social Text's 1996 issue on the science

wars, it's a reasonably interesting paper! It's intended just as nonsense, but Alan Sokal produced this elegant and intriguing, if occasionally schematic critique: a paper he clearly spent time and ingenuity composing, rather than the horrid robot made gibberish he claimed afterwards that it was. Or, like, it's nonsense but it illustrates again that there's just no such thing as "mere" nonsense, from jabberwocky on. It's also good that "Postmodern" theory understands, models, and responds precisely to his tactics: he wants to convince the world that Post-structuralist theory is malevolent nonsense. But he thinks, maybe because of who he is, that this argument shouldn't or can't be made in empirical or analytical terms: an essay written in the conventions of analytic philosophy won't make his point loudly enough to convince those wacky philosophers. So he pulls a prank, or in a ham-handed imitation of the discourse that he ham-handedly - imitates, he quotes and creatively reads some of the post-structuralist canon's most ponderous passages towards aporia. What I think he ignores is that a savvy Post-structuralist is already in on the joke, and perhaps that the parodic praxis doesn't undermine the text, but manages instead to make its gaps and clumsiness more interesting. If Sokal had more earnestly read the texts he endlessly footnotes, he might have realized that his paper's effect as a condemnation of the postmodern humanities is only visible or real if you can

hear him chuckling over his keyboard: Sokal's actual most damning criticism is that he made up some physics without anyone calling him out on it, which is a rather easy thing for a physicist to do. It should be part of our training, I think - Sokal not as a warning but as an example of the kind of rigorous game we're invited into playing, as an unwitting example of one of the very tactics his paper is ostensibly a condemnation of.

<QIANA> Fair enough? <\QIANA>

 Yup. That is my opinion on this matter. <\LI>

<QIANA> Noted down. <\QIANA>

 Don't quote me on it. <\LI>

<QIANA> We have had enough discussion, so let's have a cup of tea! <\QIANA>

<\SOKAL>