

Spaceships, Plumbing, *and the* Fate of Humanity



An imagined conversation, sometime in the late 1980s.

The room is too large to be called a studio and too cluttered to be called a conference room.

On one wall, Syd Mead has pinned a rendering of an immense vehicle moving through a city at night. Its surfaces catch reflected advertisements, streetlights, architectural illumination. Even the things that have no obvious purpose seem as though they must have one.

Against the opposite wall stands a John Berkey painting.

Or perhaps half a painting.

A gigantic spacecraft hangs above a planet, except that parts of the spacecraft scarcely exist at all. There are strokes of gray, white, rust, violet. A blister of light. A suggestion of towers. The eye completes what the brush refuses to explain.

Mead studies it for several seconds.

MEAD: Where does the crew go?

Berkey looks up.

BERKEY: Inside.

MEAD: Inside what?

BERKEY: The ship.

MEAD: John, half the ship isn't there.

BERKEY: That's why it looks so big.

Mead smiles.

MEAD: Well, that's certainly one solution.

MEAD: I suppose this is where we disagree. If I draw something, I need to know why it looks the way it does. Not necessarily every bolt. But I need to know what the object is. What powers it. Where people enter it. How large it is. What the machinery is doing.

BERKEY: I don't.

MEAD: Obviously.

BERKEY: You say that as though you caught me stealing.

MEAD: I'm admiring the confidence of the crime.

Berkey turns the painting slightly toward the light.

BERKEY: You're designing a machine. I'm painting an event.

MEAD: But the event contains a machine.

BERKEY: Maybe.

MEAD: That is unmistakably a spacecraft.

BERKEY: To you.

MEAD: To anyone.

BERKEY: Good. Then I've done enough.

Mead walks closer to the canvas.

MEAD: There's no obvious structural logic here.

BERKEY: There's visual logic.

MEAD: Those are not the same thing.

BERKEY: They don't have to be.

MEAD: They do if you're asking someone to believe in the thing.

BERKEY: No. They have to believe in the picture.

That stops Mead for a moment.

Berkey points with the end of a brush.

BERKEY: Look here. Bright mass. Dark mass. Small light. Huge empty area. Then this little interruption here.

MEAD: A shuttle?

BERKEY: If you like.

MEAD: You don't know?

BERKEY: I know what it does in the painting. It tells you how big everything else is.

MEAD: That is actually design.

BERKEY: Don't start.

Mead returns to his rendering.

MEAD: The danger in science-fiction illustration is arbitrary complexity. The artist thinks the future means adding things. Tubes, fins, antennae, lights, projections—

BERKEY: You've got quite a few lights over there.

MEAD: They have reasons.

BERKEY: They're still lights.

MEAD: The point is that the future isn't decoration. You extrapolate. You ask: what changes? Materials change. Energy changes. Manufacturing changes. Social behavior changes. Once those assumptions change, the forms change.

BERKEY: And by the time you've finished explaining it, the spaceship has missed the battle.

MEAD: That's because you've mistaken thinking for delay.

BERKEY: Syd, I think. I just don't write minutes of the meeting.

Mead laughs.

MEAD: Fair enough.

BERKEY: I know whether something feels heavy. I know whether it feels fast. I know whether it feels miles long. I don't have to decide where they keep the coffee.

MEAD: Someone has to.

BERKEY: Not in my painting.

MEAD: Your crew is going to be furious.

BERKEY: Let me ask you something. What does the future look like?

MEAD: Which future?

BERKEY: Yours.

MEAD: That depends on the premise.

BERKEY: You see? You can't answer a simple question.

MEAD: Because it isn't a simple question.

Mead gestures toward his city.

MEAD: There is no generic future. A wealthy future looks different from a poor one. A society with cheap energy looks different from one where energy is scarce. A city designed around autonomous transportation looks different from one designed around private automobiles.

BERKEY: I'm not sure the viewer cares.

MEAD: The viewer knows when something feels coherent, even if he doesn't know why.

BERKEY: I agree with that. But coherence doesn't have to come from engineering.

MEAD: No. It comes from consistency.

BERKEY: Exactly.

MEAD: Which means we are getting dangerously close to agreeing.

BERKEY: Give it a minute.

Berkey studies Mead's rendering.

BERKEY: Your futures are very clean.

MEAD: Not all of them.

BERKEY: Even when they're dirty, they're designed dirt.

MEAD: Of course.

BERKEY: That sentence tells me everything about you.

MEAD: Dirt has a cause.

BERKEY: In your world it probably has a part number.

Berkey moves close to Mead's painting now.

BERKEY: You're very good at this reflected-light business.

MEAD: Thank you.

BERKEY: Almost too good.

MEAD: I'm waiting for the insult.

BERKEY: The eye can get trapped.

MEAD: Only if the hierarchy is wrong.

BERKEY: But you like giving the eye places to go.

MEAD: Yes.

BERKEY: I like taking places away.

He turns back to his canvas.

BERKEY: If I paint every surface, every hatch, every seam, I kill the size of it.

MEAD: Sometimes.

BERKEY: Most of the time.

MEAD: No. Badly distributed detail kills scale. Detail itself does not.

BERKEY: If you show too much, the viewer stops imagining.

MEAD: If you show too little, the viewer starts doing your job.

BERKEY: Precisely!

Mead stares at him.

MEAD: You say that as if it were a virtue.

BERKEY: It is.

Berkey grins.

BERKEY: You've seen ships at sea in fog.

MEAD: Naturally.

BERKEY: Do they look larger or smaller when you can't see all of them?

MEAD: Larger.

BERKEY: There you are.

MEAD: That proves atmospheric perspective, not your entire philosophy.

BERKEY: It proves you don't always need the whole answer.

MEAD: I never said the viewer needs the whole answer.

BERKEY: You need the whole answer.

Mead considers that.

MEAD: Yes.

BERKEY: That's the difference.

MEAD: Perhaps.

Berkey waits, enjoying the concession.

MEAD: But I would argue that knowing the answer gives me the freedom to choose what not to show.

BERKEY: And I'd argue that not knowing the answer gives me the freedom to discover something better.

MEAD: That sounds romantic.

BERKEY: It's painting.

MEAD: Painting is not exempt from discipline.

BERKEY: Neither is intuition.

Mead sits down.

MEAD: Here is something I suspect we agree on. A vehicle should have personality.

BERKEY: Absolutely.

MEAD: But personality comes from purpose.

BERKEY: There you go again.

MEAD: Consider a military craft. Its geometry should suggest different priorities from a passenger vehicle. A luxury transport should communicate security, comfort, prestige.

BERKEY: Maybe.

MEAD: Maybe?

BERKEY: A military ship can look beautiful.

MEAD: Certainly.

BERKEY: A luxury ship can look frightening.

MEAD: If the society that built it thinks intimidation is luxurious.

BERKEY: You just designed an entire civilization to avoid admitting I'm right.

MEAD: That is why I'm better prepared for this argument.

Berkey laughs.

BERKEY: I start with the feeling. You start with the civilization.

MEAD: Yes.

BERKEY: I paint a ship that makes me nervous, and afterward someone can invent the civilization that built it.

MEAD: Which is exactly backwards.

BERKEY: Unless the picture is good.

BERKEY: They used one of my paintings to help sell Star Wars, you know.

MEAD: I know.

BERKEY: Big ship, little ship. People remember the feeling.

MEAD: And they remember the designs.

BERKEY: Because the designs supported the feeling.

MEAD: And because they were coherent objects.

BERKEY: You really cannot let this go.

MEAD: Look at the opening shot. The little vessel goes over. Then the enormous vessel enters frame and keeps going and going. The design works because you understand the relationship instantly.

BERKEY: Which is exactly what I do with paint.

MEAD: With considerably less accountability.

BERKEY: Wonderful word, accountability. I'll put it on a tube of paint.

The room becomes quieter.

Berkey wipes a brush.

BERKEY: Do you think science fiction is supposed to predict anything?

MEAD: Not exactly.

BERKEY: Good.

MEAD: It extrapolates. Prediction is a parlor game. The interesting question is: if this technology exists, if this cultural tendency continues, if this economic condition changes, what follows?

BERKEY: I don't think about any of that.

MEAD: I know.

BERKEY: I mean it seriously.

MEAD: So do I.

BERKEY: I don't paint the future because I think it will happen. I paint it because the future gives me permission to see something impossible.

MEAD: Ah.

BERKEY: There are no eyewitnesses.

MEAD: That is an excellent way to put it.

BERKEY: Nobody can say, "That's not what a battleship orbiting Saturn looks like."

MEAD: I can.

BERKEY: Yes, unfortunately you can.

MEAD: You hardly ever make people important.

BERKEY: They're important.

MEAD: They're microscopic.

BERKEY: Exactly.

MEAD: So the machinery overwhelms humanity.

BERKEY: Sometimes space should overwhelm humanity.

MEAD: I prefer the environment to tell you something about the people who made it.

BERKEY: And I like reminding the people how small they are.

Mead looks again at the immense Berkey ship.

MEAD: There is something almost nineteenth-century about that.

BERKEY: How so?

MEAD: The sublime. Human beings confronting scale beyond comprehension.

Berkey pauses.

BERKEY: I'll accept that.

MEAD: Whereas I'm usually interested in the opposite proposition.

BERKEY: That we'll tame it?

MEAD: That we will inhabit it.

BERKEY: Space?

MEAD: The future.

BERKEY: Your future is optimistic.

MEAD: I've been accused of that.

BERKEY: You don't sound ashamed.

MEAD: Why should I be? The future is a construction project. People make things because they expect tomorrow to occur.

BERKEY: That's a very industrial-designer answer.

MEAD: Naturally.

BERKEY: My future is less certain.

MEAD: Yes.

BERKEY: Sometimes I want the ship to look magnificent. Sometimes I want it to look lonely. Sometimes I don't know whether the thing coming over the horizon is salvation or catastrophe.

MEAD: Ambiguity again.

BERKEY: You say it like a diagnosis.

MEAD: I prefer propositions.

BERKEY: I prefer questions.

MEAD: The audience should understand enough to enter the world.

BERKEY: The audience should understand enough to want to enter the painting.

MEAD: That is nearly the same thing.

BERKEY: No. Your world continues behind the picture.

MEAD: Of course.

BERKEY: Mine doesn't have to.

That surprises Mead.

MEAD: Explain.

BERKEY: The painting is the universe. The ship doesn't have to exist from another angle. It only has to exist from this one.

MEAD: That may be the most profoundly irresponsible thing you've said all afternoon.

BERKEY: Thank you.

MEAD: But I understand it.

BERKEY: There you are.

MEAD: I didn't say I approved.

MEAD: How long did that take?

BERKEY: Which part?

MEAD: The painting.

BERKEY: Not long.

MEAD: That is not a measurement.

BERKEY: Neither is "the future."

MEAD: John.

BERKEY: A few hours to establish it. Then I work back into it.

MEAD: You make decisions very quickly.

BERKEY: You have to. Otherwise you start protecting things.

MEAD: Protecting things?

BERKEY: Little passages you like. A nice edge. A good highlight. Pretty paint. Then the painting starts serving the details instead of the idea.

Mead nods.

MEAD: That I agree with completely.

BERKEY: We should mark the date.

MEAD: Industrial design has the same problem. People become attached to features instead of the underlying requirement.

BERKEY: You call them features.

MEAD: What do you call them?

BERKEY: Things I scrape off.

BERKEY: Here's one for you. Design an alien spaceship.

MEAD: Define alien.

BERKEY: You're impossible.

MEAD: No, really. Different biology? Different gravity? Different visual spectrum? Different manipulative appendages? Different social structure?

BERKEY: Something not human.

MEAD: That is not enough information.

BERKEY: Exactly why I'd start painting.

MEAD: And exactly why I wouldn't.

BERKEY: I'd make a mark I didn't understand.

MEAD: Then another?

BERKEY: Yes.

MEAD: Until?

BERKEY: Until I became curious about it.

MEAD: Interesting.

BERKEY: You'd invent the alien's tax code first.

MEAD: Only if taxation affected spacecraft procurement.

BERKEY: God help us.

MEAD: Suppose the most beautiful shape is wrong for the function.

BERKEY: Keep the beautiful shape.

MEAD: Absolutely not.

BERKEY: You asked.

MEAD: Then improve the function until the beautiful shape becomes plausible.

BERKEY: That is cheating.

MEAD: That is design.

BERKEY: There's your religion.

MEAD: And yours is apparently atmospheric fraud.

BERKEY: Atmospheric fraud is an excellent title for my retrospective.

They stand together in front of Berkey's canvas.

Mead points at a shapeless region toward the stern.

MEAD: What happens here?

BERKEY: Nothing.

MEAD: It cannot be nothing.

BERKEY: Why not?

MEAD: Because the geometry establishes a trajectory that implies—

BERKEY: Syd.

MEAD: Yes?

BERKEY: Look at the bright area.

Mead does.

BERKEY: Then look back at the dark area.

He does.

BERKEY: Did your eye travel across the ship?

MEAD: Yes.

BERKEY: Then it works.

MEAD: As a composition.

BERKEY: That's all I promised.

MEAD: It still bothers me.

BERKEY: Good. You'll remember it.

Mead laughs quietly.

Mead pulls a sheet of illustration board onto the table.

MEAD: All right.

BERKEY: What?

MEAD: Let us test this.

He puts down a marker.

MEAD: We design the same spacecraft.

BERKEY: We already know how that ends.

MEAD: We establish only three conditions. It is approximately two kilometers long. It operates between planetary surfaces and orbit. It carries six thousand passengers.

BERKEY: That's already far too much information.

MEAD: Precisely.

BERKEY: And what do I get?

MEAD: Paint.

BERKEY: That's enough.

An hour passes.

Mead has produced a series of small exploratory sketches.

The vehicle has evolved through them. Early versions are blunt. Later versions become increasingly elegant as functional problems are absorbed into the silhouette. Passenger volumes sit within enormous structural masses. Engine systems occupy distinct zones. Smaller vehicles establish scale. The last drawing looks inevitable.

Berkey has produced one painting.

It is enormous.

Not literally, of course. The board is only a few feet wide. But the spacecraft appears to occupy miles.

It comes through yellow-white haze above a planetary horizon, its underside almost black. A scatter of illuminated marks implies structures too numerous to count. Portions dissolve into light. A tiny transport, almost an accidental stroke of paint, approaches the vessel.

Mead studies it.

MEAD: It cannot land.

BERKEY: You don't know that.

MEAD: I do.

BERKEY: How?

MEAD: There is nowhere for the landing gear to go.

BERKEY: You can't see the landing gear.

MEAD: That does not improve the situation.

Berkey studies Mead's design.

BERKEY: Yours can land.

MEAD: Yes.

BERKEY: Mine makes me want to know what happens when it does.

Mead looks back at Berkey's painting.

A long silence.

MEAD: Damn you.

Berkey sits.

BERKEY: You know what we're really arguing about?

MEAD: Enlighten me.

BERKEY: Whether the artist owes the viewer an answer.

Mead thinks about this carefully.

MEAD: No.

BERKEY: No?

MEAD: We're arguing about where the answer lives.

Berkey waits.

MEAD: In my work, the answer exists behind the picture. I may not show it, but I want the sense that if you walked around the object, opened the door, sat in the seat, pressed the control, something would happen.

BERKEY: Yes.

MEAD: In yours, the answer happens inside the viewer.

Berkey nods.

BERKEY: That's better.

MEAD: You provide enough information for the mind to manufacture the rest.

BERKEY: Exactly.

MEAD: Which is dangerous.

BERKEY: Why?

MEAD: Because the viewer may invent something better than you did.

BERKEY: Syd, that's the whole point.

Evening has come.

The Mead rendering glows under the studio lights like a window onto a city that might actually be built.

The Berkey painting glows differently. It seems less like a window than a memory of someplace no one has visited.

MEAD: I think people will build things that look something like my pictures.

BERKEY: They probably will.

MEAD: You don't sound jealous.

BERKEY: I hope nobody builds mine.

MEAD: Why not?

Berkey looks at the titanic vessel.

BERKEY: Because once somebody builds it, we'll know what it looks like.

Mead smiles.

MEAD: And you would rather wonder.

BERKEY: Wouldn't you?

Mead looks at the unfinished spaces in Berkey's ship.

Then at the carefully resolved surfaces of his own.

MEAD: Occasionally.

Berkey raises an eyebrow.

BERKEY: Careful.

MEAD: About what?

BERKEY: You're becoming a painter.

MEAD: And you're one landing-gear drawing away from becoming a designer.

BERKEY: Never.

MEAD: We'll see.

They look again at the two futures on the wall.

One has been designed.

The other has been discovered.

Neither man is willing to concede that the distinction may not matter.

The studio door opens.

Harlan Ellison enters first.

He takes three steps, stops, looks at Syd Mead's meticulously rendered spacecraft, then at John Berkey's enormous half-imagined one.

Behind him, Arthur C. Clarke enters carrying himself with the serene air of a man who has already considered the heat death of the universe and found it mildly interesting.

Ellison points at Mead's painting.

ELLISON: What the hell is that?

MEAD: A transorbital passenger vehicle.

Ellison points at Berkey's.

ELLISON: And that?

BERKEY: A spaceship.

ELLISON: Thank God. One normal person.

Mead folds his arms.

MEAD: John cannot tell you where the crew enters.

ELLISON: I don't care where the crew enters.

MEAD: They have to enter somewhere.

ELLISON: Maybe they're born inside it.

MEAD: That creates considerably more problems.

ELLISON: Syd, I have been in this room fourteen seconds and you've already invented obstetrics for a painting.

Clarke has quietly moved closer to Berkey's canvas.

CLARKE: Interesting.

Mead immediately turns.

MEAD: What is?

CLARKE: The lack of evident propulsion.

Berkey gives Mead a triumphant look.

BERKEY: See?

MEAD: He didn't say it was good.

CLARKE: It may be.

Mead looks betrayed.

MEAD: Arthur.

CLARKE: If the technology were sufficiently advanced, visible propulsion might be rather primitive.

Berkey smiles broadly.

BERKEY: Thank you.

MEAD: He also said might.

ELLISON: Syd, you're cross-examining an adverb.

Clarke now studies Mead's ship.

CLARKE: Six thousand passengers, you said?

MEAD: Approximately.

CLARKE: Long-duration transport?

MEAD: Potentially.

Clarke nods thoughtfully.

CLARKE: Then sanitation would be an interesting problem.

Ellison throws both hands in the air.

ELLISON: THERE IT IS.

Everyone looks at him.

ELLISON: I knew it. I absolutely knew it. We have entered the future and within thirty seconds Arthur wants to know where everyone defecates.

Clarke turns calmly.

CLARKE: It is a serious engineering consideration.

ELLISON: It is also why nobody ever puts engineers on movie posters.

Mead is already pointing at the lower deck.

MEAD: Waste processing would probably occur here—

ELLISON: Stop.

MEAD: It closes the loop on—

ELLISON: Syd.

MEAD: —water recovery and—

ELLISON: SYD.

Mead stops.

ELLISON: John painted a ship that may be ten miles long and may not even exist from the other side, and somehow your first instinct is to install plumbing in it.

Berkey nods.

BERKEY: That is exactly my objection.

MEAD: Your passengers would appreciate plumbing.

BERKEY: My passengers are three brushstrokes.

MEAD: That explains the morale problem.

Clarke steps closer to Berkey's painting.

CLARKE: What happens here?

He indicates a massive region of the vessel that dissolves into darkness.

BERKEY: Nothing.

MEAD: Thank you.

CLARKE: Nothing?

BERKEY: I didn't paint it.

CLARKE: But conceptually?

BERKEY: Also nothing.

Mead turns to Clarke.

MEAD: Do you see what I've been dealing with?

BERKEY: The eye completes it.

MEAD: The eye is apparently doing unpaid subcontracting.

ELLISON: That's art, Syd.

MEAD: That is negligence.

Berkey points to Mead's ship.

BERKEY: Your problem is that you think every object owes you a deposition.

MEAD: Objects have consequences.

BERKEY: Not mine.

MEAD: Yours have lighting.

BERKEY: Which is more important.

Mead looks physically pained.

Ellison walks between the paintings.

ELLISON: You know what's wrong with both of you?

BERKEY: I'm sure you'll tell us.

ELLISON: Neither one of you has put an actual human problem in the picture.

MEAD: It's a vehicle rendering.

ELLISON: Exactly.

MEAD: That isn't a criticism.

ELLISON: It is from me.

Ellison points at Mead's pristine cabin windows.

ELLISON: Six thousand passengers, right?

MEAD: Yes.

ELLISON: Fine. One couple is divorcing.

MEAD: Why?

ELLISON: Because they're married.

Clarke suppresses a smile.

ELLISON: A teenager hates the destination. Somebody lost his luggage. Somebody's lying about why he's on board. Somebody has a rash he refuses to show the ship doctor.

Mead stares at him.

ELLISON: There. Now I believe in your future.

MEAD: You believe in it because someone has a rash?

ELLISON: Absolutely.

CLARKE: There is something to that.

MEAD: Arthur.

CLARKE: Mundane difficulties are generally quite persistent.

ELLISON: Thank you.

CLARKE: Though medicine may improve enough to—

ELLISON: Don't cure my rash, Arthur. It's all I've got.

Clarke turns back to Berkey's ship.

CLARKE: Of course, the more interesting possibility is that no humans are aboard at all.

Berkey looks intrigued.

BERKEY: Machines?

CLARKE: Perhaps.

MEAD: Then the internal geometry changes completely.

ELLISON: Of course that's what you heard.

Mead is already sketching.

MEAD: No atmosphere. No pressure vessel in the conventional sense. No seating. No corridors sized for humans—

BERKEY: No bathrooms.

Ellison points at Berkey.

ELLISON: Finally, progress.

Clarke continues.

CLARKE: In fact, a sufficiently advanced machine intelligence might not need a ship.

Everyone pauses.

BERKEY: Then what am I painting?

CLARKE: Possibly a temporary arrangement of matter.

Berkey stares at his canvas.

ELLISON: Arthur just erased your spaceship with one sentence.

CLARKE: Only philosophically.

BERKEY: That's worse.

Ellison suddenly points at Clarke.

ELLISON: You have no right criticizing anyone's spaceship.

CLARKE: Why not?

ELLISON: You gave us a black rectangle.

Clarke sighs.

CLARKE: The monolith.

ELLISON: Yes, the monolith. The most famous piece of cosmic furniture in history.

CLARKE: Its simplicity was the point.

ELLISON: It's a slab.

CLARKE: A deliberately proportioned slab.

Mead perks up.

MEAD: Precisely.

Ellison turns on him.

ELLISON: Don't encourage him.

MEAD: The absence of visible mechanism communicates technological superiority.

ELLISON: Oh my God. You two have turned a rectangle into a design symposium.

Berkey studies an imaginary rectangle with his fingers.

BERKEY: I like it.

ELLISON: Of course you do. Half your spaceships are rectangles that escaped before you finished them.

Berkey laughs.

BERKEY: That's unfair.

ELLISON: Is it?

BERKEY: Some are triangles.

Berkey pulls out another painting.

It depicts something colossal, asymmetrical and profoundly ominous.

BERKEY: All right. Alien vessel.

Mead leans forward.

MEAD: What species?

Berkey blinks.

BERKEY: Alien.

MEAD: That is not a species.

BERKEY: I didn't invent them.

MEAD: Then how do you know how they build?

BERKEY: I don't.

MEAD: Gravity?

BERKEY: Don't know.

MEAD: Atmosphere?

BERKEY: Don't know.

MEAD: Manipulative anatomy?

BERKEY: Syd—

MEAD: Visual spectrum?

BERKEY: Syd.

MEAD: Reproductive strategy?

Ellison nearly spits out his coffee.

ELLISON: We were discussing a spaceship and somehow Syd is now demanding to know how the aliens mate.

MEAD: Biology influences tools.

ELLISON: I know that, but you reached genitalia with astonishing efficiency.

Clarke peers at the painting.

CLARKE: Actually, Syd has a point.

Ellison stares at him.

ELLISON: Of course he does. You're both impossible.

Clarke gestures toward the vessel.

CLARKE: Truly alien technology ought to emerge from truly alien assumptions.

Berkey shrugs.

BERKEY: Mine emerged from a large brush and burnt umber.

ELLISON: At last, an honest methodology.

Mead gestures at the painting.

MEAD: Suppose they evolved in high gravity.

Berkey sighs.

MEAD: Structures become lower, more compact. Their transportation systems emphasize—

ELLISON: Wait.

Mead stops.

ELLISON: You just invented an entire extraterrestrial civilization because John refused to finish the back of a spaceship.

MEAD: Someone has to.

BERKEY: No one has to.

MEAD: Someone does.

BERKEY: Why?

Mead actually pauses.

His expression suggests this question has never before occurred to him.

MEAD: Because otherwise we don't know.

Berkey spreads his arms.

BERKEY: Exactly.

Mead recoils slightly.

ELLISON: John, you've found his kryptonite.

Clarke takes a seat.

CLARKE: Perhaps the problem is that each of us expects something different from science fiction.

Ellison groans.

ELLISON: Oh, good. A panel discussion has broken out.

CLARKE: Syd wishes the future to be internally coherent.

MEAD: Yes.

CLARKE: John wishes it to be visually compelling.

BERKEY: Yes.

CLARKE: Harlan wishes it to contain emotional conflict.

ELLISON: I wish it to contain blood.

CLARKE: Metaphorically?

Ellison looks at him.

ELLISON: Don't ruin this.

Clarke continues.

CLARKE: And I suppose I want it to make us reconsider our assumptions.

Ellison points around the room.

ELLISON: So Syd builds the future, John paints the future, Arthur explains why the future makes us obsolete, and I yell at everybody in it.

Berkey nods.

BERKEY: That sounds right.

MEAD: Disturbingly.

Ellison walks over to Mead's cityscape.

It gleams with vast architecture and immaculate transportation systems.

ELLISON: Here's what bothers me about your future.

MEAD: I'm listening.

ELLISON: It looks like somebody competent is in charge.

Mead smiles.

MEAD: Is that so implausible?

Ellison turns slowly.

ELLISON: Syd.

Mead starts laughing.

ELLISON: Look at human history.

CLARKE: There has been progress.

ELLISON: Arthur, we invented nuclear weapons and television game shows in the same century.

CLARKE: Civilization is uneven.

ELLISON: Civilization is drunk.

Mead gestures at the city.

MEAD: I'm not suggesting perfection. I'm suggesting people continue solving problems.

ELLISON: And creating new ones.

MEAD: Certainly.

ELLISON: Fine. Put one in.

MEAD: One what?

ELLISON: Problem.

Mead looks at the city.

ELLISON: Break a transit line. Add a strike. Put graffiti on something.

Mead's expression tightens.

ELLISON: See? He can't do it.

MEAD: I can do it.

ELLISON: You're sweating.

MEAD: I am not sweating.

BERKEY: Put graffiti on the transport hub.

Mead looks horrified.

MEAD: It would destroy the visual hierarchy.

Ellison points triumphantly.

ELLISON: THERE. THAT'S THE REAL DYSTOPIA.

Clarke has been staring into the middle distance.

CLARKE: I suspect one thing all of us underestimate is communications.

Ellison looks wary.

ELLISON: Go on.

CLARKE: Imagine nearly everyone on Earth possessing immediate access to enormous quantities of information.

BERKEY: That sounds useful.

CLARKE: It might be.

MEAD: Education would change enormously.

CLARKE: Yes.

ELLISON: And within six weeks somebody would use it to distribute pornography.

Everyone looks at him.

Ellison shrugs.

ELLISON: I know people.

Clarke pauses.

CLARKE: That does seem statistically plausible.

ELLISON: And arguments.

BERKEY: Arguments?

ELLISON: Millions of them. Constantly. People you've never met screaming at you from Cleveland because you used the wrong comma.

Clarke smiles.

CLARKE: That seems unnecessarily pessimistic.

Ellison points at him.

ELLISON: Remember this conversation.

Berkey looks at his huge ship.

BERKEY: So what would actually make a future scene believable?

MEAD: Functional consistency.

CLARKE: Consequence.

ELLISON: Somebody behaving badly.

BERKEY: Light.

All four look at one another.

ELLISON: That may be the most concise explanation of our careers anyone ever produces.

Mead pulls out a blank sheet.

MEAD: Fine. Let's design something together.

Ellison laughs immediately.

ELLISON: This will end in murder.

MEAD: One spacecraft.

BERKEY: Large.

MEAD: Define large.

BERKEY: Very.

MEAD: That is not a unit.

ELLISON: Already excellent.

Clarke considers.

CLARKE: Let us say five kilometers.

Mead nods.

MEAD: Mission?

BERKEY: Unknown.

MEAD: No.

ELLISON: Yes.

MEAD: Absolutely not.

CLARKE: Unknown to whom?

Everyone turns toward him.

ELLISON: See, this is why Arthur gets invited back.

Clarke continues.

CLARKE: Perhaps its purpose is unknown to humanity, but perfectly clear to its builders.

Mead relaxes.

MEAD: Fine.

BERKEY: Good.

ELLISON: And there are humans aboard.

MEAD: Why?

ELLISON: Because otherwise I have nothing to do.

CLARKE: Perhaps they entered accidentally.

Ellison's eyes light up.

ELLISON: Now we have a story.

Mead frowns.

MEAD: How do they breathe?

Ellison slams his palm against the table.

ELLISON: GODDAMMIT, SYD.

BERKEY: The ship is so large you never see the whole thing.

MEAD: Acceptable.

ELLISON: Write this down. Syd has accepted ambiguity.

MEAD: I accepted incomplete framing.

ELLISON: Same disease, early stage.

CLARKE: The vessel is ancient.

BERKEY: How ancient?

CLARKE: Perhaps older than humanity.

ELLISON: Better.

MEAD: Then materials become an issue.

Ellison closes his eyes.

ELLISON: Here we go.

MEAD: If it has survived for millions of years—

CLARKE: Self-repair.

Mead brightens.

MEAD: Yes.

BERKEY: Its surfaces shift?

CLARKE: Possibly.

ELLISON: And somebody aboard realizes the ship has been repairing them.

Silence.

Clarke turns.

CLARKE: That's rather good.

Ellison looks delighted.

ELLISON: Thank you.

Mead thinks.

MEAD: Mechanism?

Ellison drops his forehead onto the table.

Clarke looks again at the collaborative sketch.

CLARKE: Perhaps the most advanced civilizations cease building machines in any recognizable sense.

MEAD: Go on.

CLARKE: Matter itself becomes programmable.

BERKEY: So architecture can change.

CLARKE: Continuously.

MEAD: Then there are no fixed components.

CLARKE: Correct.

ELLISON: So Syd's entire career just became software.

Mead ignores him.

CLARKE: At a sufficiently advanced stage, distinguishing between machine, organism and environment may become meaningless.

Berkey stares at his canvas.

BERKEY: That's beautiful.

Ellison looks suspicious.

ELLISON: Arthur, are you describing God again without admitting it?

Clarke smiles.

CLARKE: I'm describing technology.

ELLISON: You always do this.

CLARKE: Do what?

ELLISON: Walk right up to theology, put on a lab coat, and pretend nobody noticed.

Mead laughs so hard he has to sit down.

Clarke looks mildly amused.

CLARKE: The universe is considerably larger than human concerns.

ELLISON: Yes, and human beings are the ones buying the books.

CLARKE: That seems temporary.

Ellison stares.

ELLISON: You keep saying things like that in the tone of a man discussing rainfall.

CLARKE: Would you prefer alarm?

ELLISON: Occasionally!

CLARKE: Very well.

Clarke straightens theatrically.

CLARKE: Humanity may eventually be superseded by machine intelligence and reduced to a brief transitional phase in the evolution of cognition.

He returns to his normal posture.

CLARKE: Better?

Ellison points at him.

ELLISON: See? That's terrifying.

BERKEY: I'd paint it.

MEAD: I'd like to know what replaces us.

ELLISON: Of course you would. You'd ask it for dimensions.

Berkey points at Mead's design.

BERKEY: Your trouble is still detail.

MEAD: Your trouble is still the lack of it.

BERKEY: I want the viewer to participate.

MEAD: I want the viewer to believe.

ELLISON: I want the viewer to suffer.

CLARKE: I want the viewer to think.

They all pause.

Berkey nods.

BERKEY: We should never collaborate.

ELLISON: On the contrary. It would be magnificent and completely unmarketable.

Clarke proposes an experiment.

CLARKE: Look at the same painting and each remove one thing.

He indicates Mead's futuristic city.

Berkey goes first.

BERKEY: Half the windows.

MEAD: Why?

BERKEY: Too many answers.

Ellison points.

ELLISON: Remove one of the elegant couples walking through the plaza.

MEAD: Why?

ELLISON: They look happy.

MEAD: People are allowed to be happy.

ELLISON: Not both of them.

Clarke studies it.

CLARKE: Remove the road.

Mead turns.

MEAD: Why?

CLARKE: By the time the rest of this exists, transportation may no longer require one.

Mead looks troubled.

Finally everyone looks at Mead.

BERKEY: Your turn.

Mead stares at the picture for nearly a minute.

ELLISON: He can't do it.

MEAD: I can.

Another pause.

ELLISON: Syd.

MEAD: The decorative railing.

Ellison explodes.

ELLISON: THE RAILING?

MEAD: It is redundant.

ELLISON: We killed love, roads and half the architecture, and Syd removed a railing because it failed a cost-benefit analysis.

Clarke is laughing now.

BERKEY: Fine. Add one thing.

Mead instantly answers.

MEAD: Service access.

Ellison nearly falls out of his chair.

ELLISON: Of course.

Berkey thinks.

BERKEY: Fog.

MEAD: Why?

BERKEY: Because your service access is ugly.

Clarke considers.

CLARKE: A very small object in orbit.

ELLISON: What is it?

CLARKE: We don't know.

Mead starts to speak.

Ellison points at him.

ELLISON: Do not ask how it works.

Mead closes his mouth.

All three stare.

MEAD: I was going to ask how large it is.

Ellison screams into his hands.

Berkey walks over to the window.

BERKEY: Maybe realism isn't about making the thing work.

Mead responds instantly.

MEAD: It helps.

BERKEY: Maybe realism is making the viewer react correctly.

Clarke nods.

CLARKE: Emotional plausibility.

ELLISON: There you go.

Mead considers.

MEAD: But if the underlying design contradicts itself, eventually the illusion collapses.

BERKEY: Only if the viewer notices.

MEAD: The viewer notices subconsciously.

ELLISON: You both give the viewer entirely too much credit.

Clarke smiles.

CLARKE: Harlan may have finally solved the problem.

ELLISON: Thank you.

CLARKE: The future will probably be stranger than Syd predicts, more functional than John cares about, less rational than I hope, and populated by exactly the sort of people Harlan fears.

Ellison slowly nods.

ELLISON: That's pretty good.

BERKEY: Paintable.

MEAD: Designable.

ELLISON: Horrifying.

CLARKE: Then we have consensus.

They gather their things.

Berkey stops beside his unfinished spaceship.

BERKEY: Syd.

MEAD: Yes?

BERKEY: I've decided where the crew enters.

Mead looks genuinely interested.

MEAD: Where?

Berkey points to an indistinct dark patch.

BERKEY: There.

Mead leans closer.

MEAD: That is a shadow.

BERKEY: It's an airlock now.

MEAD: There is no structural indication—

BERKEY: Airlock.

MEAD: John—

BERKEY: Airlock.

Ellison throws an arm around Mead's shoulder and begins steering him toward the door.

ELLISON: Leave it, Syd.

MEAD: But it makes no sense.

ELLISON: Neither does humanity. We've been shipping that for thousands of years.

Behind them, Clarke takes one last look at Berkey's vessel.

CLARKE: Strictly speaking, it may not require an airlock at all.

Mead turns around in the hallway.

MEAD: Arthur, don't start.

Clarke smiles.

CLARKE: I merely thought—

Three voices answer at once.

MEAD, BERKEY, ELLISON: WE KNOW.

The door closes.

Berkey's impossible ship remains on the easel.

Half-designed.

Half-painted.

Almost certainly leaking atmosphere.