

AirSpace Season 11 Episode 4- Movie Mini: Arrival- Transcript

Emily: I think instead of a theoretical physicist, they should have ended up having a philosopher at the end of the movie that we got introduced to that helps us understand how the world handles this new kind of, like, information and power.

Matt: Yeah, maybe played by Jeff Goldblum.

Emily: Ooooooh.

Matt: Dr. Ian Malcolm rides again.

AirSpace theme in then under

Matt: Welcome to AirSpace from the Smithsonian's National Air and Space Museum. I'm Matt.

Emily: And I am Emily. In the event that aliens came to Earth, how would we communicate with them and what would they say when we did this is the question that starts *Arrival*, a 2012 sci-fi film¹ where the linguist is the star.

Matt: Communication is eventually achieved and with it an upending of time, which leads to more questions like, if you knew what was going to happen, can you change it? Would you even want to try?

Emily: Communication, time, and more thorny questions from the silver screen today on AirSpace sponsored by Lockheed Martin.

AirSpace theme up and out

Matt: Alright, so we've already put out some spoilers here. There is a big time component in this movie, but you know what? The movie came out in 2012, so if you haven't seen it yet, go watch it, then come back and listen to this episode.

Emily: Or listen to our episode and be inspired to go see it.

Matt: There you go. *laughs*

¹ <https://www.imdb.com/title/tt2543164/>

Emily: So I feel like when it comes to sci-fi films, this is actually not a particularly complicated plot overall, which is kind of your basic aliens come to earth, earthlings try to figure out what to do about it, chaos ensues, and then there's some sort of wrap up at the end, right? And there wasn't even a nuclear explosion in this one. So like very simple.

Matt: Yeah, that's right. And a lot of times when we watch sci-fi movies that represent first contact with aliens, we're either seeing it through the, you know, the eyes of a military person or a ship captain, right? Who's first encountering the aliens. Or maybe we're seeing it through the perspective of a scientist who's trying to figure out who the aliens are, where they came from, why they're here, et cetera.

But in this case it's a linguist who's, you know, providing the primary perspective through which we are encountering these aliens. And it's this question of how do we communicate and how do we learn a language that we've never seen and haven't evolved to speak from first principles, basically.

Emily: So when we're first introduced to the linguist, Dr. Louise Banks, played by Amy Adams, we see her as a professor at some university when this first contact happens. At the same time we're being given bread crumbs about her past? Question mark²? And it seems like she's going through a grieving process having lost her daughter to cancer. Maybe. We don't have enough information

But the movie starts in this moment when first contact happens and the world is freaking out. But we're also getting these personal flashes of, we're gonna call the memories, I think, for now, of experiences that Louise Banks has had as a human, uh, living in the world.

And these two things kind of collide and become interwoven throughout the story.

We meet Colonel Weber, who's played by Forrest Whitaker, who shows up to her office and is asking her whether or not she can translate this audio file that they have of the aliens... what they're assuming is language. And she makes this argument like, I can't do it from this. I need to be on site. 'Do they even have mouths?'³

And I really enjoyed that part of the setup of the story and how Louise fits into helping the military solve the problem of communicating with these aliens. And when she gets recruited onto the helicopter to be flown out to the site where the Spaceship? Pod? Thing? is in the United States, which I think is in Montana.

² Yes, Emily actually says question mark

³ Direct quote from the movie

We meet sort of the other main character in the film, Dr. Ian Donnelly, who's played by Jeremy Renner, and where Dr. Banks is the linguist who's really trying to help solve the communication problem. Jeremy Renner's character, Dr. Donnelly is a theoretical physicist and he's really there to try and help solve the scientific problems and learn more about the aliens and how they got here and what they know, technologically speaking.

Matt: And here's, you know, this is one thing I really appreciated. As the historian of the group is you don't always see someone, I guess I'm gonna count the linguist as from the humanities, but you don't always see someone from the humanities participating in these kinds of first contact scenarios.

And I know she's there for a very practical reason. But oftentimes when this scenario is imagined, people with this type of expertise or any kind of cultural expertise are just kind of, you know, not included in that sort of sci-fi imaginary of who's important in that moment.

Emily: But I think this is a 'yes, and' moment because Matt, I agree with you completely that having a linguist be kind of that lead brain in the room was such a unique and special way of telling this story of first contact. But what I also really appreciated was how linguistics was really shown in all its scientific rigor, right?

Yes, I agree, from a language standpoint, there's certainly this really heavy humanities component, but being able to show that there's this really important synergy between humanities and sort of physical sciences and math and computing and technology, and showing the intersection between those two points, I thought was also really powerful at giving a lot of strength and robustness to something like linguistics.

Matt: Yeah, absolutely. Yeah, definitely highlights that kind of, you know, scientific dimension of linguistics in a great way. And then also I thought does a beautiful job, um, of kind of portraying the, the intangibles as well. The ways that language is connected in ways that we barely really understand to how we think about the world, how we perceive it, and how we act in it.

That language shapes so much of that for us and also for the aliens and that sort of, you know, that power of, of language, not just to communicate, but to shape your world.

Emily: So to move ourselves through this plot a little bit more, I think we have to talk about the Heptapods, which is sort of what everybody starts calling the aliens. And if you haven't seen the movie, the best way to describe the way these aliens look is, it's like if a squid or an octopus species crossed with the hand⁴ from the Adams family, right?

⁴ Thing, Emily remembered eventually but that didn't make the cut

So obviously hepta-seven, right? So it's not just five fingers, it would be seven. But they're these great big sort of almost squid like things.

And, you know, Dr. Banks really is spending a lot of time using a lot of unorthodox methods, trying to gain more time and patience from the military as she works through in the movie, an abbreviated series of scenes where she works really hard to break down simplistic concepts in a way so that she can be understood by the Heptapods and that they can communicate with her the same idea in their own language⁵, and this is where things get for me, really complex, but also really exciting in how they built this perception of these aliens and how they communicate.

Matt: Yeah, and we're not given a lot of detail about what's happened in attempting to communicate with the aliens before Dr. Banks arrives. And we get a little bit, just minimal information about what's happening at those other sites, 'cause there are 12 different sites where the aliens have landed and they're in different countries.

But what we do learn is that Dr. Banks's approach gets the most traction. Somehow she is the one who, you know, makes the first kind of leaps forward in attempting to communicate with the Heptapods.

Emily: And what's interesting is how the international collaboration is this really open network of scientists who are working really hard.

As soon as somebody learns something, they're passing it on to every other country. That has one of these pods, alien ships, I don't know in their, in their country, right? There's 12 of them distributed across the globe.

And when the military starts to get really impatient about how Dr. Banks is communicating and really trying to get at the purpose of the aliens being here, it's another sort of linguistic open-ended question about how you're translating interpretations of words. And so when Dr. Banks asks the question 'really seriously, guys, what are you doing here?'

And they say, 'give weapon,' we're here to give you a weapon. The question then becomes, do they really mean weapon? And this is where all the geopolitical stuff goes dark, right? Everybody who's been collaborating together is being ordered to no longer collaborate.

⁵ In the short story the military directs Dr. Banks to teach the Heptapods as little English as possible. Which the Heptapods seem totally ok with.

Matt: Yeah, and there's another dimension to this too, which is the feelings of the other folks who are outside of all of those, high level negotiations and especially, you know, the general public and the media reacting to minimal information about the Heptapods because they're not getting that much information from their governments about what's happening inside of those ships. And what's the nature of the relationship between humans and the Heptapods? Are we now being taken over by aliens? Are we gonna fight the aliens?

There's, there's not a good sense of it, and there's a great deal, of course, of fear and uncertainty in ways that, you know, ultimately lead to one of the, um, turning points in this movie, which is that a group of rogue soldiers from the sort of base camp where they've been working with the Heptapods, plants a bomb inside of the ship that our main characters aren't aware of, and that they go then into the ship and, you know, the Heptapods end up saving them from the bomb while at the same time suddenly giving them a big explosion of Heptapod language. So there's the literal explosion of the bomb, and then the figurative explosion of the language, uh, where suddenly they're given all of these characters all at once.

Emily: And this is, we're now at a point where Dr. Banks is relatively fluent and one of the main characteristics of this language that's really pushed comprehension forward and gained fluency for Dr. Banks is this recognition that the aliens sort of know approximately the full, beginning, middle, and end of their thought, um, before they speak it.

And it gives this sense of time in how they're communicating in that they don't think about time linearly. They don't think about it as beginning, middle, end. They think about it kind of all at one time. And that sort of leads us to that next plot point because really, rather than providing a weapon, the Heptapods are providing a language.

It's not a weapon, it's a gift. And this gift of language also comes with a shift in how you think about time because of how you think about how you communicate involves time. I don't know how deep we wanna get into this, Matt, because the whole time component gets really confusing, but essentially by learning the language, Dr. Banks receives that language, which is a gift which allows her to understand the memories she's been having, which in fact are glimpses of the future.

Matt: Yeah, so there's a, what I think of as like, you know, um, a very, very sci-fi moment in this film. Not that the whole film isn't sci-fi, but you know, when you suddenly learn that the time component is very important to the story, um, it's at this moment right after the explosion where things are falling apart geopolitically, and the base camp is being torn down.

Uh, and you know, basically we're going on military red alerts, uh, with what's going on because suddenly we have acted aggressively against the aliens and there's no way to explain to them that we didn't plant that bomb on purpose, that it was rogue elements. Right? Um, and Dr. Banks suddenly has access to all of these alien characters⁶ and suddenly is able to learn the Heptapod language, not because she's able to work really quickly and figure it out, but because she's able to see herself in the future learning and teaching the language, so suddenly she knows the language because she's going to know the language, which is a little bit paradoxical. Right?

This is one of those things that science fiction can get away with. Because people love a good paradox. But what she also then starts to realize is that these memories that she's been having and that we've been seeing on screen, that we've thought came from the past, these are actually memories that she will make in the future about her marriage and her daughter, and the ultimate death of her daughter.

So this is that turning point in the movie where by knowing the language now, she actually is able to understand everything that she's been thinking and feeling throughout the course of learning the language.

Emily: And this is where I think in no other film in history the linguist is going to save the day because at this point, everybody, as you mentioned, Matt, everybody's on high red alert. Nobody knows whether or not the Heptapods are going to react negatively or positively to a lot of the tumultuousness that's been going on.

And so everybody's getting really nervous and certain countries are getting really ready to take very extreme military action. Because they just don't know what's about to happen. And Dr. Banks really saves the day and is the hero of this film in that she uses this Heptapod language that she now understands along with its relationship with time, and is able to communicate to, in this case it was the Chinese commander. She's able to get his personal number, call him on his personal cell phone and gain his trust.

And she's able to get everybody to stand down, which is really what needed to happen to keep this from becoming a global crisis that could really be affecting everybody on the planet to really taking, accepting this language as the gift that it is and sort of sharing it with the world instead of, you know, nuking aliens,

Matt: Yeah, that's right. And so this moment in which everything seems to be falling apart then turns into a moment in which everything comes together. This new language of Heptapod becomes a kind of uniting language for all of humankind.

⁶ Characters meaning letters/circular language representations

Emily: And so, Matt, this is where I kind of wanna start asking you some questions because what I loved most about this film, was literally the plot of the science fiction film we've just laid out for everybody. But what's harder to communicate in a plot summary is some of these broader themes that are threaded throughout the film that are related specifically to these flashbacks, which we find out are flash forwards.

And those flash forwards are not only helping us to learn but also I guess seeing the future, but is also sort of probing that sort of question of what choices would you make if you knew what your future held, which is ultimately kind of where we end up in the movie.

And I kind of want your sort of literary perspective on, how that landed for you. Because for me in the film, it was this great sci-fi movie and there was kind of this other stuff happening in the background that was like, felt a little bit afterthoughty, but there's kind of a reason for how this came to be in the movie.

Matt: Yeah, so the movie is based on a short story⁷ by the science fiction author Ted Chiang. Ted Chiang has been on the podcast. He was on our, um, "side pod," Voyages to Mars⁸ reading one of his other science fiction stories back a few years ago. And, um, I would say that he, as a science fiction author is very poetic in his approach to science fiction.

And I think when he crafts short stories like the one that this movie is based on, um, you know, he's really masterful at, uh, putting those things together and connecting with readers on not just a 'sci-fi is cool level,' but a really emotional level.

And if you read that story, uh, movie aside for a second, what you really find is that this is a story about pain and loss and love, where, you know, learning the language is an important component to, um, you know, that story of like, 'yes, I, I sort of, I know ahead of time that my marriage is going to fail. I know ahead of time that my daughter is going to die at a young age. And yet I'm going to enjoy these moments. I'm going to live in my present and I'm not going to try to avoid that fate that I know is coming.'

And so I think on that level, what this story is about and then what the movie encapsulates in the story of the daughter and the memories that then become visions of the future is that that fact of human existence, that we wouldn't live any other way, right? Just because we know that pain is attached to our love and our joy.

⁷ Story of Your Life, https://en.wikipedia.org/wiki/Story_of_Your_Life

⁸ <https://airandspace.si.edu/stories/editorial/voyagestomars6>

Emily: Yeah, and I think, you know, I didn't read the short story. I didn't read Ted's short story, but bringing the movie back around to other science fiction. Right, you know, I've, I've kind of compared it to why it's not Independence Day and maybe why it's not Men in Black in that there's no time spent on all of these advanced technologies that aliens have brought to Earth.

But I think what's really interesting about *Arrival* for me watching it was its parallels to the movie *Contact*, which we've also done an episode on⁹, which is both a book and a movie. And I think what's really interesting in *Contact* is that there's maybe less time spent trying to communicate with the aliens and more time spent trying to understand what the aliens have given us.

Which isn't totally different, right, than what Dr. Banks is doing because while Dr. Banks is trying to teach the Heptapods our language, they're also trying to teach their language to us.

And there's a lot of really interesting parallels also in how the film ends in that, Dr. Ellie Arroway in *Contact* is kind of the only person that really has an experience with the aliens at the end of *Contact*. And in *Arrival*, Dr. Banks is really the only human who has a close connection to the aliens in that same way.

And in both instances, at the ends of the films, both of those-- I'm gonna call a linguist a scientist, Matt-- both of those scientists really take on the responsibility of communicating their experiences with the world in, albeit two different ways, but they're kind of left being the, the keepers of that information and the sharers of that information.

Especially given the knowledge that *Arrival* is based off of a completely different short story with a completely different theme.

Matt: Yeah, I wouldn't call it completely different, but, you know, uh, I think what's, what's in the short story is the kernel of what we see in this movie. But maybe the emphasis shifts a bit because of its translation into a bigger story with more sort of characters moving around in the background and other things being foregrounded at different times that aren't in the short story.

But you know, one of the interesting things about the short story is that it is completely told from Dr. Banks's perspective, and it's pretty much her writing to her daughter. And in it she gets to kind of describe to her daughter how the language changes the way she thinks. So I thought maybe I could read that part of it, since you haven't read this story

⁹ <https://airandspace.si.edu/editorial/airspace9ep10>

Emily: Yeah, I would love to hear it

Matt: And let me know if it sheds any light on, um what, what, uh, what was going on.

So she says: before I learned how to think in Heptapod B, my memories grew like a column of cigarette ash laid down by the infinitesimal sliver of combustion that was my consciousness marking the sequential present. After I learned Heptapod B, new memories fell into place like gigantic blocks, each one measuring years in duration. And though they didn't arrive in order or land contiguously, they soon composed a period of five decades[...]Usually Heptapod B affects just my memory. My consciousness crawls along as it did before, a glowing sliver crawling forward in time. The difference being that the ash of memory lies ahead as well as behind.

Emily: Oh, that's some lyrical writing.

Matt: That was her description of how it affects the way she thinks and sees the world.

Music Button

Emily: But what do you think, Matt, like, is this a movie you've recommended to people? Do you recommend this movie? How do you feel about it? Like you had to watch it again, right? To get ready for this, which means you've now watched it twice.

Matt: Yeah. You know, when we first talked about doing this movie for our movie episode this season, I did remember watching it in our IMAX at the museum back when it first came out and really enjoying it then. And so I thought I would enjoy watching it a second time, which I did. And this time I watched it with my wife, Jeanette, who had not seen it before, and, uh, got to experience it through her eyes, but also got to see things that I had missed the first time around.

And, um, you know, I did the exact same thing when I finished watching it the second time that I did the first time, which was I went and grabbed that short story that Ted Chiang wrote and read it through again so that I could remember, you know, how the movie differs from the short story, but also just kind of enjoy that short story again because I think it is very beautifully written and poetic.

But, um, yeah, I would recommend this film to, to other folks. Even to, to folks who aren't interested in science fiction, because I think it does have at its heart that very human story of how we deal with loss and why we love, even though we know that we will end up experiencing loss and grief as a result of it.

Airspace theme up and under

Emily: AirSpace is from the National Air and Space Museum.

It's produced by Jennifer Weingart and mixed by Tarek Fouda. AirSpace is hosted by Dr. Matt Shindell and me, Dr. Emily Martin. Our managing producer is Erika Novak. Our production coordinator is Joe Gurr, and our social media manager is Amy Stamm.

Did you know the transcripts of our episodes include citations and extra fun facts? You can find them linked in the show notes along with the signup for our totally hilarious monthly newsletter. For additional content photos and more follow AirSpacePod on Instagram and X. We're also on YouTube shorts, check us out on the museum's page.

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