say the uh drawing at the back of you you did that right right yes yes yes uh uh the one on the right yeah right behind you yeah oh there are two of them oh there are two yeah so the green one i did um it's a painting of uh a trek i did in um in colombia oh oh i see colombia south america in south america sura pedida and then the this one you might recognize it's a it's a uh it's a copy of the uh of uh funkwon's very uh favorites of course uh nonsong painting i see wow yeah i actually i've seen some of your paintings in the singapore's uh in nus yes yes a number of your paintings which is very nice yeah i converted my painting room into my office so that's the reason why you see the painting okay okay all right so let me let me begin um i had a long conversation with uh

already and there's one thing i i meant to ask him but i somehow didn't get around to it i'll give you a little bit of my interaction with nus way back when i was a young boy right my mother uh graduated from a university in shanghai called well it's called shanghai university

right and uh she had uh a classmate uh whose name is sung singtang i don't know whether you ever heard of his name uh he was when we met when i met him he was a professor of english literature at net at university of singapore

and of course later on he left and became a professor at cambridge and through him there was a there was a chinese art expert historian art historian he's a british man called michael sullivan again i don't know whether you've heard of him but somehow when i was a little boy he was he was much older than than me by a long shot and so he he sort of considered me as his uh as uh uh what do they call this uh gun earth uh in english it would be adopted no it doesn't sound right adopted son but anyway scanner uh god god god son and of course eventually he went back to came oxford and then he was recruited from oxford to be one of the top art historian of stanford why am i telling you this what i'm what i think back that that university of singapore at that time would have people of this caliber implies that there must be a certain level of intellectual ambiance within the university even though i'm sure in the in the 50s or 60s there is essentially no what we call today research at university of singapore am i correct uh there was some there were some for example i mean in medical area some globally significant work in say connectors neonatal jaundice thalassemia so there was some but not to the scale that we see today yeah but i think that maybe the fact that

university of singapore had such a level of intellectual strength that eventually when it started to grow it didn't grow from zero it actually had some history behind it so this is what i would like to ask uh uh uh in chai but i i either forgot or just didn't get around to it so i thought perhaps we could begin with that discussion yes i think it is correct that uh in the early days of uh the university of singapore by the way were were you a student at university of singapore yes i was in the transition uh so i i started a university of singapore and i got my degree from national university of cfo so when what year was that uh i started in 78 1978. okay 78 and uh i graduated in 83 okay so when i joined it was university of singapore when i graduated it was national university in singapore okay that's when that's when nanyang university merged into it right yes okay in 1980 okay i i think in the early days of uh the formation of university of singapore the cohort sizes were very small it was something in the region of like one percent of the cohort so

the um quality of the students extremely high yep and they also had as you noted uh very good people in the in the faculty you're in the medicine school i was in a medical school uh but i would say that it wasn't just medical school i mean it's more generally that the quality of the students and the quality of faculty was high of course the research tended to be localized in a certain number of areas so in medicine you know in pediatrics in in vitro fertilization in fact in transsexual surgery and um you know we uh were globally significant uh i mean in in terms of uh research in these areas uh then i would say that uh when when uh

singapore uh in his later part of his developmental cycle in the in the late 70s 80s to the 90s there was a lot of focus on the manpower training and uh as you noted uh there was only one university yep the the merger of uh university with the university of singapore and so nus then became very big it grew very big very quickly and its uh major focus was really education educating uh talent for uh the growing uh economy of singapore and uh and that very rapid uh growth i think uh led to a very strong focus in education and uh so that uh by the time trunfong uh took over uh and myself uh i mean we have a very strong foundation uh despite the fact that we have a much larger student enrollment but the quality what was what was the number of students uh well uh it's it's right now for undergraduates this is about 30 000

so it's a big undergraduate population but i would say that the quality of school education junior college education in singapore is very high and so despite the fact that the numbers were high i would say that the quality of students was also high we didn't see the spread that we would normally see if the school preparation was not as good uh so we have a strong base uh we went through a period of racket expansion as a teaching university from one year um so when chun phong started we just in the year 2000 2001 uh he inherited a strong uh teaching university right and uh which was quite well connected but which had a very strong focus on uh training for the local economy and what he did uh was to uh make the trans to start the transition towards uh much more research intensive university and towards a much more globally oriented university and when i was president uh you know we carried it further along those lines but i would uh add one foot one last point were you uh were you a provost at that time i was provost from 2004 okay okay to 2008 uh when i became president and uh what i uh did was uh two things one was to uh build research but to try to create stronger links to education what does that mean so research education and its application and we can talk about a bit about what that means and the second was uh to be uh of value locally by being well connected globally of course so so we can also talk about that if you like yes please but uh but i would say that's uh that kind of ex it's really an answer to the question that you asked yes uh while you're while you and tr while tren phong and you um we're trying to not work in the process of transforming the university both from teaching into teaching and research uh did you receive pushbacks from you know after all there must be lots of faculties that's hired before this change they were not expected to do research and now by putting research as one of the important criterias for either for them either to promote themselves or or be hired into the new cadre of faculty would that be were there pushbacks and if so how did you handle it so the first point i want to make uh teshwan is that the changes that we have affected are much more fundamental than just teaching to research because firstly we moved towards a much more american system of uh managing and faculty uh expectations of faculty so there were changes

to uh the compensation system so we we moved from a compensation system based on seniority mainly to one which is almost entirely performance based so let me explain give an example so uh a uh assistant professor in um a very hot field could actually earn more than a full professor in um in the humanities example okay i think market rates if you uh if you perform very well uh your uh compensation could increase uh much faster than someone who did not perform well so basically it became a lot more performance based so that's one very big change the second was the change to the 10 year system when when we started the 100 system was almost automatic you know it's a function of uh having been around for a long enough time and you know but then what trunform put in place was an american style tenure system ten years multiple committees uh up and up you know up or out yup and uh i would say that's a very dramatic change uh and that uh took us i think at least five years to make the transition to uh fully um understand the how to operate it properly and fairly and uh and how um this would uh contribute to faculty development and to anyways development and uh as part of that change uh we also moved to american titles you know uh assistant professors and so on uh although that looks like a superficial change to me as part of a wider set of changes so you have to understand uh that it is within this context of a much deeper and much more extensive program of institutional change that this research teaching issue should be contextualized yes so in other words research and teaching and service were part of the expectations of faculty

their own development and their contribution to university and because of the new tenure system a high bar could be set and progressively increased in order to get the quality up and when i was provost uh as well as dean of medicine and uh provost uh we moved uh quite decisively from a number of publications to quality of publications so just as a granular example you used to be how many hundreds of publications have you got yeah but we said actually we only are interested in uh the top publications and we had various ways we experimented with to define that and also your best publications so your channel review was centered around your best publications and the intellectual contribution that you made and why that matters rather than just counting how many numbers of publications you have which is actually the previous system so it's from quantity to quality it's from quantity to quality and the one thing that tuneform was very uh focused on which i'm sure he'll tell you about when he uh talks to you is he used to say this teaching this research and their service and he used to say that a cc is better than bbb

because he his point was uh if uh everybody was a bbb then nus will at best be a big school yup whereas if uh enough people were ace well i mean doing a good enough job so a c is a good enough job right so it's not like uh uh not paying attention but uh if we have enough a's then of course nus as a whole would have a chance of being an a in some things and that a could be teaching it could be research and after you get your tenure it could be administration but before tenure it's teaching and research and after tenure it can be teaching research or administration but i mean his main point which i i think was a good one was be really good at something at least one at least one okay of course if you are a walk on water and you're good in all three then you know we we we celebrate and we you know we we we reward you uh but if you are you're not a walk-in water yeah category then be good at this one not everyone can be one can woof yeah correct so so i guess the point i'm trying to make uh uh darshan is uh you have to think in terms of nus's transformation not just as from teaching to research and what happened and all

that but that there was actually much much more fundamental transformation and uh another thing i would say before i stop here is uh we also had increasing amounts of autonomy so in the year 2000 we were statutory board so we had quite a bit of autonomy in uh several areas like hr and so on but as you probably know in 2006 uh we became a company yep and this was uh with the full support of the government and the goal was to allow nus ngu and smu to have the autonomy to pursue excellence

to have uh the that means you that means you can define what excellence is yes and we can decide what to pursue uh with our board uh what we will focus on but uh we have a strong accountability framework because we are largely funded through public money so so yes we have the flexibility but we have an accountability right so we can't just do anything we like right of course the autonomy is to give us the ability to excel in the things that we are accountable for so for example uh in preparing graduates for singapore's future

therefore we it's not just about research and being good at research it's about accountability for the things that matter to to singapore so we have a strong focus on education innovation we have a very strong focus on research we have a strong focus on commercialization and as i mentioned earlier i had a particular interest in how to bring all these things together to create a very different learning environment right right okay um so first of all when you're going through this you you would have a cadre within the university or faculty that cannot come go through the change how do you ease them out so one uh what happened was uh our previous retirement age is 55 why yeah this was in uh 2001 it was 55. so when we move men or women everybody everybody oh wow and so when we moved to the new tenure system uh we argued successfully for the retirement age to be raised to 65 okay but it was not automatic ah okay so you had to cross a high enough bar okay to be considered for moving to 65. so quite a number of people decided to call it quits because they because they know they cannot pass it they can't pass it so quite a number of people uh uh chose to leave at 55 or those who were younger than 55 felt or go and do something else

those who could go over the bar uh were extended to 65 and then i had as provost to manage a transitional period where there were quite a number of faculty who were not deemed to have crossed the bar to be moved to 65 we we said we'll give you an opportunity to work towards it because we didn't want to just say uh yes or no yeah so there were a number of faculty where we said okay we can't give it to you now but uh if you show sufficient uh

indication of a different trajectory uh then you know uh we will consider you again two three years later i see which is what we did and um and so i would say uh uh so i would say it was a combination of uh people decided to embrace the new system because actually for people who are good it's a much more exciting system of course of course of course of course so is this 55 how did that come about i i've never heard anywhere in the world that is that early for university oh no this was uh in the 2000s and it was tiger's civil service oh i see even before i mean all the way all along until until 2000 yeah oh i see yeah wow so people leave at 55 all of them yeah mostly yeah oh i see so it allowed this this allow you to make this change yes i mean if you get a u.s system where you're infinite then of course it won't work yeah it wouldn't work um it wouldn't

work um so i would say uh that it was not easy i mean uh i you know i mean it's been a long it does a long time ago uh it was really not easy i mean we had a lot of flank you know i mean imagine changing compensation system of course in your system of course people that there's about you know i mean

but it was actually very hard to do right right i would say that we persisted and we also had strong government support which is much needed because uh you know if uh

if not then it will be extremely hard to um to to to see the changes true right now the uh as the old saying you know vision without funding is hallucination um you obviously ha like you said had strong government support and one of the support is obviously the amount of money they pour into the university so somehow between the university's administration or faculty and the government there must be a rapport that convinced the government that higher education is is more important than what normally people think of because the way the nus has grown in the last 20 years and i looked at your ranking say 20 25 years ago you know it's it's it's not that good but it it it's the change not that i believe totally about rankings uh but it gives an indication uh that it could go from a school that few people would talk about until today where you're ranked with yales and so on um it it's a huge transformation that other asian universities could only wish so you must what you have told me up to now is what a good universities would do but that probably is not enough for this spectacular transformation that you have made so what is it that aus how it could be the case study for all asian universities to learn about yeah i would say uh that um when i try to explain this uh restaurant as you say it's a function of ample resources yeah governance yeah competition those are the the basic triangle yeah but i would also maybe want to add that oh wait a minute uh ample resources governance and what and competition and competition okay yeah because you know if you give money to uh somebody yeah and the other monopoly you know they may not be very good because that's right that's right there's no incentive but i will also maybe uh add um that we uh talk very deeply about strategy

so coming back to your first point why was the government so supportive yeah the wider context is really important i'll take a couple of minutes to explain in the you know at the it was end of the 1990s we could very well see that with the rise of china with uh you know the uplift in all around the region that singapore had to move to become a knowledge intensive society we had to become a knowledge intensive economy we had to generate our own intellectual property we had to generate our own products innovations and services we could not just uh be efficient middle people middlemen or efficient processes and that transformation requires really really strong r d and it requires very strong universities so i think that is i would say the most fundamental

form of thinking that drove a lot of uh what we are seeing uh in the the downstream the consequential changes right that's from the government side that is from the government side the the serious desire to uh shift singapore to become a knowledge intensive economy and a knowledge intensive society and as a consequence of that we have the changes in the universities that i described but we also had the start of a big investment into r d so if you look at

singapore's uh r d uh investment uh before the year 2000 it really was very modest yeah in the year 2000 uh the research budget allocated to both nus and ntu before the merger was like 50 million dollars a year 5-0 yeah it was only after 2000 as part of this knowledge intensive drive that the research funding became much more significant so what i'm painting here is a convergence of a few very powerful drivers a strong [Music] commitment to become a knowledge intensive society the fundamental changes in the way the universities are run uh in the autonomy being given by universities to become a powerful uh drivers of innovation and a a signifi a very substantial increase in research funding

so it's a combination of these factors coming together i think that uh created the uh conducive environment for uh for very um for deep transformation uh so i will talk in a minute later if you like about uh at least how i thought about strategy but uh i think this context is really important uh but to then um execute it of course is the different matter right that's right of course and uh the execution needed uh uh you know the the focus in the institution but working very closely with uh the government who are major funders that's right but but that's the execution part right yeah but why are why were we doing this fall very clearly driven by the realization of singapore's need to transition to become a knowledge intensive society a knowledge-based society

okay any economy

okay um but but this this cannot come automatically it would come from a mindset change of a society that probably in the 80s and 90s would not be so robust in in this area whereas by 2000 it started to become mature in this area so for those 10 15 years there must have been some serious discussions at very top level in singapore's government uh and who would be the drivers of that in in this in this transformation i mean this is a non-trivial thing i think yeah and you're right it wasn't a light switch so it wasn't it it's not a light switch so it wasn't light switch it was a combination of uh you know uh years of uh thinking and working and it was led by the government and i would say that the uh individual who was the the most important champion of this was uh at that time deputy president uh deputy prime minister tony tan

the minister or the deputy prime minister in charge of higher education yeah and also very influential in thinking about the economic development of singapore and uh he really championed this he really drove this uh help to lay the framework and to secure the funding yeah and uh later on in 2006 he also was the person who

argued successfully for the formation of the national research foundation so so yes it was a culmination of a much prior discussion and it was uh i think also leadership to convert that discussion into a set of big ideas and the ability to secure the resources and the commitment to follow through on those big ideas yeah yeah and and to be able to sustain it and to be able to sustain it yeah i mean just talking about it is not enough talking is cheap so ultimately he the government delivers this consistently for a significant period of time yeah decades i mean our case is now two decades that's right so so literally in the last 20 years the transformation took place yes and i would say that the transmission of nus of the university's parallels a transmission of singapore right we are now i would say a much more knowledge intensive

society a much more knowledge intensive economy and uh the recent or the ongoing covet pandemic has really shown i mean the the benefits of having a huge and a world-class installed science base so so it's we are starting now uh to see the fruits of uh two decades of investments i don't think we have uh realized the full potential of uh the fruits that could be obtained but at the very least now we are starting to see very clearly uh very tangible indications that we're leaving the fruits of that long-term investment

yeah so um what about globalization um singapore is a small country five million is that five million now it's 5.7 okay almost 16. um the the number of people that you are pumping out of your institutions especially in u.s at some point may not be able the society may not be able to absorb them simply it's just not big enough a country uh actually that's that right is that true okay that's not true uh industrial because we are a small physical space but we are a very large economy yes of course in fact we worry we don't have enough local people for the many things our economy requires okay you know uh so we have to think in terms of the economic space as opposed to our geographical limitations yep for example

in in the various schools that you have how do you determine how how big should be your engineering school uh and and at what level of your engineers should be should you be very very advanced in your engineering research or are you print pumping out a large number of bachelor's degree engineers for those you need both in your of course um but you know so how do you how do you plan for these things in the university there is a uh inter uh ministry uh body that tries to do manpower planning but we all realize that it's very very difficult uh very very difficult but we do uh plan how many engineers we need how many doctors we need how many of this and how many of them so we do have that broad numbers but the universities have a lot of latitude to translate those numbers on the ground so we have some plus or minus factors so we we are giving so we have a range and uh so different universities can choose their strategy right how are you going to do that right i i think you know that um we uh we at the university level i think um i can speak for nus because i'm more familiar with it uh we think in terms of a number of key considerations the the first is whether those professional

professionally certified groups would randomly be certifiable so if you're a doctor or engineer or whatever our education clearly has to allow you to meet whatever bar for uh certification accreditation you require so that's a very minimum but i say this because um we also know that um you can train someone as an engineer but they end up in finance or of course of course and they're usually good at it uh yeah because people go everywhere so that's where our emphasis has really been on broad-based education right so so we want to make sure that we uh are able to meet whatever uh certification and accreditation requirements they are but on top of that we need a broad-based education uh and we've been continually thinking about this and continually adjusting to to and the fundamental question is what does the educated graduate of the future need to be able to succeed and thrive over a 40-year period that's the fundamental question right and of course we don't know what the answer is but uh we try to create uh programs and uh um

educational opportunities that allow for that right then the second thing is we for a large university you cannot have a one-size-fits-all that's right that's right so in another country like the us uh you would choose between a number of universities each of which would take in maybe 4 000 undergraduates a year right right yes so here you come to nus maybe every year we'll be taking 7 000 undergraduates every year right those undergraduates are very different and so within nus what i had i did as president was to create many different pathways that students can opt for can compete to enter that uh will cater for different uh types of uh so we have an engineering science program that is uh very deep into uh you know uh math uh into academic then we have uh engineering programs which are much more practice oriented that require you to make things uh we have uh programs that are uh we attach people to uh startups in silicon valley and in uh in 12 or 13 places around the world uh we have uh programs that uh uh work study programs uh like the cooperative programs we want to do so we have actually created um quite a diverse set of different pathways and on top of that so we we started with a broad-based education and we offer now also a big residential component right so you can live and study and then we offer many different pathways where uh where students can go and then to fill it out we also offer unique opportunities through double degrees joint degrees with overseas universities and you know i i i don't know what the number is right now but we when i was president we'll have 40 50 of these right probably pretty significant very significant and including some uh impossible to get opportunities our students get to spend a whole year in yale we have students who can spend a whole year in cambridge so not just a two-week attachment no serious right right engage right right so the point i'm trying to make is we satisfy whatever professional standards we make it very broad-based yep and then we offer many pathways right data for people of different right aspirations and capacities right so that there is an opportunity to do the things that would make you more uh able to adapt in the future and i'll say two final things on this point uh dash one the first is uh has taken this one step further now he's created colleges and so on i'm sure you must have spoken about that and for me i created i i helped set up the year language college uh did you guys okay okay i know that so those were all part of the same philosophy that i underlined and the second thing i want to say is that i always encourage students

not to

make up their minds too quickly what is useful and what is useless

okay and not to focus too much on grades by which i mean that uh you do something which may not be immediately useful for you but it could be useful for the future like writing courses of course like painting behind you yeah and you and you do things you are not good in because it will be helpful for you right and the main reason why we uh have a great free first year yeah almost the entire first year is grade free i mean you have expense you know what your grades are but they don't come to us your gpa yeah yeah yeah because we want students to do things they're not good at right right useful like if you're a history student you should go and take some uh math yup or statistics or vice versa or vice versa you know you should do things that will give you high grades right right so so i'm describing um how we conceptualize the strategies

by which we can really answer the question how do i prepare graduates who can adapt and thrive for the next 40 years right i mean so so this piece is all about education

ah very interesting let me ask probably maybe in my mind a critical question

a friend of mine spent a year in ntu he's an american and spent a year there and he came back somewhat disappointed this young man and i asked him why he's disappointed he said well i thought that i went to an asian university i was hoping to really learn the asian mindset and what i found is that i got pretty much the same mindset as i have at berkeley he's a berkeley undergraduate and so my question i think your your the painting you have behind you uh inspired me very much about the fact that nus or ntu for that matter but but we're talking specifically nus nus is a great asian university it's not an american university or a british university it can be as good but it is still something that they cannot be and that namely they are not they'll never be an asian university and that the students that you will produce could very well be the leaders of asia if not singapore and to do that then they will have to have profound understanding of other asian cultures so how does that factor into your university's management thinking it's a very central part when i became president i defined what is the core of what we're going to do and it's encapsulated in the following words a leading global university centered in asia influencing the future so leading global university means that we operate at the highest global standards of course people based on global standards yeah we compete on global standards and we have innovations which are get adopted and accepted globally of course centered in asia means that um we ensure that um the educational experience that our students undergo uh also factor in the context of asia now so this is quite simple for medicine for humanities and arts but let's say for engineering etc right engineering is engineering math is math but in the rounded broad-based education even engineers even mathematicians need to understand uh

disciplines outside of their own and they need to understand asia right so so centered in asia at one level uh means that in our education in our research orientation we look at issues which are most pertinent to asia and we make contributions to them but scented in asia has another flip side which is for asian universities who want to look to become global to become

international the way nus has succeeded becoming we also want to be able to show how a asian university with all of our roots and contexts can compete at a completely global level of course so so centered in asia uh has many many meanings for us it also means uh growing enough local talent it means understanding how to navigate the issues getting things done in asia so the year lenders college for example uh we are trying to educate um [Music] graduates who are not just going to criticize everything and to ask questions and uh break you know uh uh turnover tables and all that because in asia that's unlikely to work we want graduates to be very critical to ask questions but be able to uh understand the context of asia and to create change with those within those contexts then you can really be an effective leader right right so sense in asia is very important and then influencing the future right influencing the future means that the things that we do in education through our alumni in our research in his application we are helping to shape the future right right so this is really important because it's about impact right

right and the really important point i want to make uh downstream is how to bring all this together right so one of the last features i gave at nus was i would like nus to be a place where students study and be immersed in a culture in an environment that is actively creating the future

right so you feel that you can contribute to changing the future you can see people working on technologies and ideas that can help shape the future and we hope you'll be inspired

to believe that you too would be able to influence the future right so there's this important confluence of the education research and application into creating a culture and environment where uh people study people do research people apply to research uh but feel that by doing so they can shape the future i think this is really really critical because we all know it's not just your technical ability it's your um ambition level for the future uh your your self-confidence self-confidence yourself belief yeah you know they were a small player but we can be a significant contributor right right you know uh chochon in 1957 two chinese lee and yang i don't know whether you know them won the nobel prize

and i remember uh i was a i was in sixth grade you were not born yet i think am i right 1959 57 yeah yeah i wasn't fine yet okay all right so so you you cannot possibly know this uh but it is something that people in singapore you know get very excited but i i later on i remember people would say oh yeah this this can only happen when they're in the west you know it cannot happen here this is what i would call the third world mentality that that great things cannot happen here that has changed uh i think that uh people young people no longer have that sort of mindset anymore and part of that is this enormous transformation called china in asia yeah that you know in many ways it affected every one of us in one way or another so in some sense the the national university of singapore understanding of the globe especially understanding the globe in terms of china and united states now and and other places in the world become so important how how does nus uh fold this into their their education mission

oh you have a meeting yeah i would say that uh through the many connections that we have so we try to make sure that we have many partnerships in china many partnerships in the in the west many partnerships in southeast asia and i would say that um there is the theoretical and academic understanding but there's also the direct experiencing that's right that's right i think the direct experiencing of it is really important of course you

you you know you can only do this if you are immersed in it that's right until we create opportunities so we have overseas colleges in shanghai in beijing around the world we have exchange programs around the world we have research partnerships we have to try to create those bridges everywhere so that our students our faculty are well plugged in and i would say that as we then move on into application right application of our research commercialization i hope it will spark a new wave of um that first-hand experience when uh our faculty start to try to commercialize in the region in the west in china that then the links to the industry in the different parts of the world would become stronger and stronger and that i think would provide additional lift to the role that we want to play of being useful and relevant to both the east and the west i

will also make the point uh darshan that is true that china's example has inspired people throughout asia but for a small little country like singapore it can also be a bit daunting right i mean you are just like people i mean what chance have you got to succeed right right if you start to have the attitude you're finished that's right the whole essence of being a knowledge intensive society is to believe that you can that's right that's right right uh because you're supposed to innovate is supposed to yep yep you products that people want so that's self-confidence that's right self-belief is absolutely critical to underpin this entire application

one of the uh presidents of caltech one used to say that caltech is small but they don't think small yeah and singapore apparently is not thinking small singapore is small but it's not thinking small i mean once you start thinking small then you will become small that's right that's right well thank you so much uh cho chuan i know that you're busy i really appreciate you taking time uh if i have additional questions may i just send emails to you and when you get a chance to to give me some answers is that okay yeah sure yeah it's so good by the way your wife and my wife have the same names as you recall mine is also evelyn yeah say hi say hi to her i met her in in taiwan that's right yeah yeah so please give me yes give my best regards to her

bye-bye