I = interviewer; P11 = participant. Refer to DDM2020 dataset documentation for more information.

1 2 3	I	so you said that you wanted to talk about er a face mask project could you just tell me very briefly about the the product
4 5 6 7 8	P11	yeah okay my name is ((name)) I am a product designer specialised in sustainability and social innovation er sorry about the noise there is some accident er a neighbour cutting something a machine
9	I	okay haha
10 11 12 13 14 15 16	P11	erm er basically I work I have a design office called ((name)) and I research bio design which is using bio materials in order to design the product errr in this sense when we we have coronoa before just before we had the coronavirus outbreak er I was er with some friends doing er a job like for a client ((inaudible))
17 18 19 20		er we were saying how design somehow lost it's path and it's totally market oriented and doesn't actually attend to real life er problems you know real issues for society
21	I	yeah
22 23 24	P11	and there's an author who writes about that in the seventies er wrote about that he is called Victor Papanek
25	I	yeah
26 27 28 29 30	P11	and well he's a big reference for me it's a big reference especially because since most in Brazil and America are living well as er as the whole world's living like this and the right wing er trying to bring old days back
31		I like using an old writers to answer to this
32	I	yeah okay
33 34 35 36 37	P11	this things you know so we're talking about that and there's an Indian Brazilian author called Krenak that he wrote a book last year called er I will translate ideas to postpone the end of the world
38	I	mhm
39 40	P11	and it's more about philosophy but how the consumerism society and how er merchandise

41		ideology er made me go to a path where natural
42		resources are seen as something that you could
43		sell which is marketed while for Indians it's an
44		entity the river has a name the river is your
45		relative

| 46 | I | mhm |

47	P11	so you should take care of your relatives so this
48		idea this philosophy that that native Indians in
49		Brazil have about nature is totally different of
50		what we the our Western society have

51		in this sense in the sense we I wanted to do a
52		design exibition that would talk about that how
53		design could answer to the sustainability issues
54		and we created a lot of this group of designers
55		working together we created created this WhatsApp
56		group which was called designs for the end of the
57		world

| 58 | I | mhm |

59	P11	and the end of the world came I know it's not the
60		end of the world it's a it's a joke but what
61		Krenak says is that for Indians the end of the
62		world started when Portuguese came to Brazil so
63		the end of the world for them is lasting five
64		hundred years

| 65 | I | mhm |

66	P11	so that is that so something about the world
67		you've known before is always ending constantly
68		now do you need to create er he used an idea of
69		the parachute how would you create parachutes in
70		order to make this fall slower and more
71		comfortable for our society

| 72 | I | yeah |

| 73 | P11 | and by this idea we were seeing er the outbreak |
| 74 | | spreading all over the world |

| 75 | I | mhm |

76	P11	and the first cases in Brazil so at the very
77		beginning of the quarantine in march we were
78		saying like well we are a group of ((inaudible))
79		designers so we are forced to be home our job
80		which is marketing related marketing and
81		industrial related is totally on hold

| 82 | I | mhm |

| 83 | P11 | so what could we do in order to use our talents |
| 84 | | to address this er real issues and we had some |

85		important issues er going on in Brazil because I
86		don't know where if you are from England
87	I	yeah I'm in Scotland now but I'm from England
88	P11	yeah well in England we probably had less of
89		these problems but in Brazil we had we have a
90		very big issue on health er structure and
91		equipment access so we have public er just as
92		England now we have public health care but at the
93		same time ((tv noise starts in the background))
94		not as equipped as it should be
95	I	mhm
96	P11	so it was a real issue of how would how hospitals
97		would be able to attend to this pandemic and at
98		the same time we had for example er many doctors
99		who didn't have equipment to protect themselves
100	I	mhm
101	P11	which causes for example Brazil being the country
102		who lost the biggest number of professionals and
103		healthcare
104	I	really mmm
105	P11	so nurses er Brazil is the country in which died
106		the biggest number of nurses in the world until
107		now and the grandfather of my daughter is one of
108		these nurse er nurses that that went away with
109		the coronavirus
110	I	on no I'm sorry
111	P11	and that touched me a lot in the sense that we
112		could be doing more then we started manufacturing
113		designing and manufacturing products such as face
114		shields such as masks but with a difficulty that
115		er Brazil has more simpler industry than most
116		developing countries we have we have a big
117		((inaudible)) on importation for materials and
118		for this project and we were seeing this
119		commercial war where America was buying all
120		products all materials er at the same time we saw
121		how garbage that single use plastics garbage
122		increased dramatically in the sense that you now
123		have millions of masks found in the ocean
124	I	yeah
125	P11	and it's contaminated er garbage and some point
126		this could go back to us so we the mask itself is
127		something that we we designed to address to this
128		four big issues er bad use because people don't
129		know how to fix

130	I	yeah
131 132 133	P11	the mask the mask properly so it loses place which is looking ridiculous our president put it in your in his eyes you know
134	I	yeah
135 136 137 138	P11	so it's almost shameful you know and er we we started to find solutions to answer to the bad usage at the same time to to answer to this single use masks
139	I	yeah yeah
140 141 142 143	P11	so the idea of developing sustainable products in this sense was not using a biomaterial it was more using er long lasting materials that couldn't be sterilised
144	I	right
145	P11	and used again
146	I	yeah
147 148 149 150 151	P11	and the other thing is that technical materials such as the fabric the SMS fabric or the the tnt er super ions which kill the virus these are materials which are harder and more expensive to find
152	I	mhm
153 154 155	P11	so what we did was using common materials to do the mask like materials that you could find in any paper shop in any er handcraft shop in Rio
156	I	yeah
157 158 159	P11	but at the same time you would have er high quality filters that could filter the air such as professional masks
160	I	right okay
161 162 163	P11	so this gave us the the result of a mask that could lat until er two months three months of use instead of two hours
164	I	yeah
165 166 167	P11	it has a better comfort in the face so the doctors who use our masks doesn't have those scars here of of stress
168	I	yeah

169	P11	of usage and at the same time we have at the same
170		time we have er sorry my daughter she's very
171		curious ((young girl appears on screen))
172	I	okay haha hello hi
173	P11	she loves cameras
174	I	haha
175	P11	so er basically we we had this situation of also
176		wanting to lower the trash and the comfort and to
177		lower the dependence on importations and
178	I	mhm
179	P11	we got very nice results we're now trying to to
180		market it and
181	I	yes
182	P11	the idea is that every sale is er soldarity sale
183		so if you buy a mask er a doctor or a social
184		worker will earn a mask as a donation
185	I	okay yeah
186	P11	so it's a very social and environment oriented
187		project
188	I	yeah and so you've talked about various different
189		sustainability aspects what was the most
190		important design decision that you had to make
191		related to sustainability
192	P11	well I think that the most important decision
193		would be to accept to use technical materials
194		which by themselves are not the most
195		environmentally friendly materials you can find
196	I	yeah
197	P11	because in this sense the health care er industry
198		needs this er sterilisation need their immunity
199		it needs materials to be inert and not react with
200		other er chemicals or to be able to host viruses
201		and other
202	I	yeah
203	P11	germs and this is something that was challenging
204		in the sense that we er we grow up as designers
205		trying to escape from plastics
206	I	yeah
207	P11	and now we go back to plastics as our main tool
208	I	yeah and so you just have to accept that that's
209		not sustainable that part of the product

210	P11	yes the sustainability is more er when you try to
211		programme ((inaudible))
212		just a second ((talking to daughter in
213		Portuguese))
214		sorry
215	I	it's okay
216	P11	she turned the tv while I'm doing the interview
217		so er I think that that the idea that er we
218		wanted to find er ((inaudible)) sense and then we
219		wanted to find to fight the lack of
220		industrialisation made us go to the most common
221		materials you could find so for example we are
222		using er ((inaudible)) styrofoam styrofoam
223		((lids)) which is a material which is poorly
224		recycled recycled here and which is er very used
225		for the cargo industry to do college and school
226		work but it does the work and as a material for
227		the masks so there's a documentary on the BBC
228		which is called the genius of design and says how
229		design addresses to to wicked problems in times
230		of history and the second world war and showed
231		how England had very big dependence on
232		importations and because of siege in the sea from
233		the German submarines it was forced to develop
234		planes and machine guns and everything with what
235		they already had in the island
236	I	yeah
237	P11	so the idea was the same how can we er use
238		materials which are already on stock in the Rio
239		de Janeiro city and how it can we from these
240		materials develops design solutions that will
241		address this problem
242	I	yeah
243	P11	so we went to supermarkets we went to hardware
244		hardware shops we went to er handicraft shops in
245		order to find materials that were before used for
246		private customers but could also become as it
247		becomes a ((inaudible)) it can become a mask that
248		filters air was the main rationality behind it
249		that what was more sustainable sustainable about
250		it was almost like permaculture in the sense that
251		you're trying to find the resources you have
252		around
253	I	yeah
254	P11	to answer to an issue

255	I	yeah and how many other people were you working
256		with
257	P11	our collective had already because it changes a
258		lot because of the daily life of people so we had
259		already ninety three collaborators
260	I	oh wow
261	P11	but we have at least fifteen to twenty people who
262		are in the collective until now when it started
263		we have around six or eight managers taking care
264		of different areas such as production fabrication
265		er design and research and we have also er
266		doctors and researchers from erm for more
267		security or for er infectologists people who are
268		scientists and are also willing to collaborate
269		with designers to develop this these problems
270		that er just societies could answer if the
271		government's not doing its work
272	I	yeah and so in a design collective like that how
273		do you make who makes the decisions and how do
274		you make them
275	P11	that's what's so fun we were able to develop
276		something er so we have a collective that doesn't
277		have the authorship as something so important and
278		this is something in the design market which is
279		hard to do the designers are er do you know Bruno
280		Latour the
281	I	yeah yeah
282	P11	er philosopher and researcher he writes something
283		in translation he would say deosigner like
284		designer as a god the whole creator
285	I	yeah
286	P11	you know this idea of the designer who wants to
287		be the creator everything
288	I	yeah
289	P11	and ((inaudible)) of everything so the first
290		thing that people have to accept is that you're
291		not going to develop or to design something from
292		the beginning to the end
293	I	mhm
294	P11	what you do will be continued by other person
295	I	yep
296	P11	and the whole ownership is collective
297	I	right

298 299 300 301	P11	so this is something that until now we managed to do well we have some some issues about it and people went away because of not being able to be the the cherry on the top of the sundae
302	I	yeah haha
303 304 305	P11	at the same time you know we we managed to to reach in four months er record numbers of donations of ((inaudible))
306 307 308	I	uhu and so if everybody's adding to what the previous person has done somebody must have chosen the materials for example
309	P11	sorry
310 311 312 313	I	so I if everybody's just adding a bit to the design somebody must have chosen the materials though like somebody would have made that decision
314 315	P11	yeah well we had the idea of having client as a part of the design of the design team
316	I	yeah
317 318 319 320	P11	so the decisions are were mainly by acceptance of the researchers and doctors er so they would say well this will not work in the hospital this will hurt my face
321	I	yeah
322 323 324 325 326 327 328 329	P11	this will er be a surface where the virus will survive or will proliferate so we base ourselves in three things er the zeitgeist that happened all over the world developing such projects so you see that it was a global movement not something that we did here but we er it spread in the world as a solidarity network parallel with the virus outbreak
330	I	mhm
331 332 333	P11	so where the virus will reach you probably would find researchers designers trying to answer to this problem as fast as we could
334	I	yeah
335 336 337	P11	so to to be able to feed ourselves with this already er done or tested products is something that helped us a lot in the decision making
338	I	right
339 340	P11	second the second thing was having the doctors and the team and researchers and being able to

341		almost act like design specialists and and having
342		the designers as the doctors themselves so they
343		would say well I need to have more ((inaudible))
344		sustain er area I need to have a place where I
345		could touch to take the masks off
346	I	yeah
347	P11	to have them as part of design team er showing
348		problems problems of our design at the time it
349		was a lot of er speed in the design project at
350		the same time as gave us a lot of er certainty of
351		why do we do ((inaudible))
352	I	mhm and what was your role particularly
353	P11	well my role at first time was mainly thoeretical
354		theoretical since I'm I just finished my master's
355		in two thousand and nineteen as a teacher and I
356		work as a sustainable consultant
357	I	yeah
358	P11	and as a product designer
359	I	mhm
360	P11	so it mainly began me as acting as catalysis er
361		catalyzer
362	I	yeah
363	P11	of of the group you know giving people er tasks
364		tasks and talking about things and showing what
365		we could do as more like a thinker
366	I	okay
367	P11	at the same time at the same time I went to the
368		managing cos I have a design office for many
369		years so work a lot as a manager and as design er
370		as communication manager so I design I worked in
371		design of some of the projects but I will say
372		that my participation in the design process
373		itself was not as relevant as other people's
374	I	right
375	P11	but at the same time I participated in all
376		projects because at the same time you're always
377		looking at the design and always criticising and
378		always participating and debating about it
379	I	yeah
380	P11	so er actively I was more a teacher and a manager
381		a design manager

382	I	okay and I guess when you're doing design but
383		also when you're just involved in design like
384		that would you say that your personal values
385		influence what you do
386	P11	er could you answe er repeat the question please
387	I	would you say that your personal values influence
388		the way you do design
389	P11	totally
390	I	or the way you manage design
391	P11	totally
392	I	could you tell me a bit about that
393	P11	well I think that er well something that was
394		telling is that when I went to do the my Master's
395		almost like this preparation of design theory I
396		was reading the last in three to four years
397	I	mhm
398	P11	were actually preparing myself to this moment so
399		when I when I read Tim Ingold and I learned about
400		correspondence in anthropology
401	I	mhm
402	P11	I'm also learning how to design as not being er
403		this perfectionist designer that tries to
404		anticipate the problems but I I but learning to
405		be a designer that learns how to solve problems
406		while the problems are ongoing
407	I	mhm
408	P11	and this is totally critical to the moment we are
409		in because you cannot wait for the answers you
410		have to be er adaptatious to answer to the
411		problems as they they emerge
412	I	yep
413	P11	at the same time er I was reading all these
414		Indians thinkers and anthropology in anthropology
415		classes and to learn how to act not as a colonial
416		designer that it's something that we hear a lot
417		how designers how the client doesn't know the
418		problems they need to solve designers need to
419		show the problems they need to solve
420	I	yeah
421	P11	and this for me the biggest lie you say in design
422		er theory
423	I	yeah

424	P11	because er we are users but users are designers
425		Manzini says that there's a inhabited design skew
426		in every human being so you weren't as er you are
427		born as a designer you when you're a kid and
428		you're trying to to put lego pieces together
429		your're a designer and this is our intelligence
430		we are specialists in this intelligence
431	I	yeah
432	P11	so to read about it showed me a lot of how would
433		be the role of designers in this process in this
434		process of er thinking er the the design of new
435		protection material products
436	I	yep
437	P11	so we should act as facilitators not as the stars
438		the authors of everything
439	I	yeah yeah okay
440	P11	so my idea of collaboration my idea of open
441		design my ideas my political ideas which are more
442		er social democrat oriented than anything else
443		which make me believe the role of the public
444		health care of the public education narrative all
445		these ideas are ideas that move not only with the
446		designers in our team the team's a lot alike in
447		this sense to work towards this direction and we
448		have er it's sad to say that we have a common
449		enemy which is the government because the
450		government was not doing its work Brazil till now
451		doesn't have the health care investment we're we
452		have two almost two months without the health
453		care investment and trying to to give solutions
454		like chloroquine which doesn't yet have er
455		scientific er approval as a medicine for
456		coronavirus because we have now the biggest stock
457		in the world of chloroquine
458	I	mmm
459	P11	we bought America's for which is ridiculous so
460		when your government do that it make it's almost
461		makes you responsible to do the opposite
462		otherwise you agree with that
463	I	yeah yeah
464	P11	so because of that this was a big motivator in
465		the sense of political values not only values on
466		the design er area
467	I	yes yeah sure and you said it almost makes you
468		responsible to to do the right thing in this case

469		do you think that as a designer you also have
470		responsibilities in terms of sustainability
471	P11	sorry
472	I	do you just you mentioned responsibility and
473		wondering if you think as a designer that you
474		also have any responsibility in terms of
475		sustainability
476	P11	yeah yeah yeah well all the papers that you are
477		reading like adressing as the designers'
478		responsibility because it doesn't have well it
479		has but not in my opinion not enough discussion
480		about the designer ethics
481	I	yeah
482	P11	er the designers are er covertly bossed by the
483		market by marketing teams by er by managers
484	I	mhm
485	P11	which tell us what to do
486	I	yeah
487	P11	so yeah in this sense we lack responsibility of
488		our actions
489	I	yeah
490	P11	because we we we're only following orders
491	I	yeah
492	P11	and this is something that I really I really
493		really bothers me
494	I	mhm
495	P11	I really try to answer when I write about design
496	I	yep
497	P11	and er I ((inaudible)) there's something that the
498		teacher which used to love to bother me like to
499		provoke me he would say that there's not sustain
500		there's no sustainable designer design there's
501		only good design
502	I	yeah
503	P11	good design is sustainable something like Dieter
504		Rams would say in the sixties you know and at
505		some point I do agree with that but if there is a
506		sustainable designer designs it's because
507		designers don't actually think in sustainability
508		as a responsibility
509	I	mhm

510	P11	but as a marketing add on when you say oh it's
511		sustainable so it sells more
512	I	yeah
513	P11	and this is something that we are trying to to
514		fight in our collective the good design is a
515		design which is more appealing which is more
516		functional but it must be sustained you you as a
517		way of looking at the product its whole life
518		cycle not only the usage life cycle
519	I	yeah yeah and and if you're working for a manager
520		or a client that that wasn't focused on
521		sustainability do you think a designer has any
522		responsibility to try to influence them
523	P11	well I think the designer I think I'm going to
524		give a ((inaudible)) answer well I think that
525		designers should act responsible at any cost
526	I	yeah
527	P11	so if it costs your job if you're if you're
528		working for someone let's say it's er well this
529		is something that I will explain but I will
530		probably want you not to write it
531		((eleven lines omitted)
532		so this is something that happens a in the market
533		I think the designers when you're against the
534		wall when they're pushed money wise to accept
535		these kind of things you're part of the problem
536		you're not part of the solution and even because
537		it's creating a sustainable er ((inaudible)) it
538		doesn't actually mean you're working towards
539		sustainability
540	I	yeah
541	P11	so we said no to this work job it could pay our
542		whole year in the office and for us saying no was
543		obvious
544	I	yeah
545	P11	so what responsibility of the designers was to
546		join themselves so and to be able to work as a
547		network and to fight to the er to the fight the
548		economical power that industries clients have in
549		order to allow us to do our work and the maybe
550		the designer really wants more authorship with
551		his own brand like Philip Stark or like other big
552		names in design you can say well I'm sorry I'm
553		not using this material because it's me it's my
554		brand so then the idea of ((inaudible)) is your
555		power of negotiation

556	I	mhm
557 558 559 560 561	P11	er for me er the main challenge is how you as a designer that works towards sustainability works towards collaboration works for open design tends to have er economic negotiation strength against big brands in the market
562	I	yeah
563 564	P11	this is a challenge er I don't know the answer yet
565	I	yeah
566 567 568 569	P11	we're trying to create the brand around the product and to to control the product brand and by that do so without using the image of the designer as this entity this whole entity
570 571 572 573	I	yeah and so in in the collective when you do collective design what are the lines of responsibility who's responsible for the final product in the end
574 575 576	P11	who is respon well the group is responsible we have we have the er how can I answer that we have the design team
577	I	yep
578 579	P11	as a group and in the end we all signed the product
580	I	okay
581 582	P11	so er if something's wrong everybody's is together
583	I	okay
584 585	P11	and not only the designers but the doctors the researchers people who who participated
586	I	yeah
587 588 589	P11	so it makes us less vulnerable in the sense that if you make a mistake you're alone but it's harder to make a mistake when you're not alone
590	I	yeah
591 592	P11	and if you make a mistake collectively you take the responsibility collectively
593 594 595 596 597	I	yep okay yeah it's really interesting it's very different from the other designers I've spoken to who are working in companies who you know have different challenges erm those are all the questions I had was there anything else that

598 599		you'd like to add relating to this the project or the topic
600 601 602 603	P11	yes well I er I think that now I'm going to actually do a doctoral project and I want to research how biodesign can work work towards er er healthcare issues
604	I	okay
605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620	P11	so I think that's I think the next step for design is er that the designers have er each time more participation in the life cycle of materials so at some point we would cut the tree and make the timber to make our product er now we already planted the tree designing the timber that you use in a product er I think that the next step for sustainable design is to make the material as ((inaudible)) to work with living materials and be able to have a new design which is more sustainable ((inaudible)) material industry and more er straight to the materials the product needs so you see that for example Gavin Munro which is a English designer ((inaudible)) who casts trees trees which are chairs which are tables the tree itself
621	I	yeah
622 623 624 625 626 627 628 629 630	P11	is moulded is ((inaudible)) to be the chair or table you see for example designers using mushroom to do er products that reduce plastics you see bioplastics you see so many materials emerge as er as an action of the sustainable design and you see research designs in the material itself a lot of materials like I think that this would be maybe the next step for sustainability
631 632 633 634 635 636 637	I	yeah interesting it's interesting to hear how some some people I speak to they find a material and they find this you know sustainable return and then they want to design based on that and sometimes it's the other way around it could be we wanna design this thing in this way what sustainable materials can we find so
638 639 640 641 642 643	P11	yeah and this could also be a way of thinking industry because as a Brazilian er I see myself as a designer in a society that is forever following er other industry steps so we're trying to have three d printers but they arrived for Europe they arrived for US
644	I	yeah

645 646 647 648 649 650 651	P11	or when you're trying to use plastics which are first launched in Europe or in America er biodesign emerges a lot in America and Europe but as er a way of rethinking the way that people are used to do things as the first humans so er in ancient china the Brazilian Indians were the first biodesigners
652	I	mhm
653 654 655	P11	and er Asia Africa South America we have a biodiversity which could offer so many design opportunities
656	I	mmm
657 658 659 660	P11	and to use agricultural processes a process rich er less less expensive machine wise that could give us er an advantage in order to to have a new indust a new ((inaudible)) industry
661	I	mhm
662 663 664 665	P11	and I think that this this could be a game changer er not only to developing countries but the whole world in a way to design the industry which is more synergyic to the natural side
666	I	yeah
667 668 669 670 671	P11	and as we're now living the consequences of the anthropocene ((inaudible)) I know that Donna Haraway has written about er how how can we answer to that so I do think that biomaterials are is a way of doing that
672 673 674	I	yeah and why do you think that you are so that you care about this so much because so many people don't
675 676 677	P11	haha well Manzini views sustainability as er giving to the new generations er the world with the same resources and opportunity as we received
678	I	yeah
679 680	P11	er our generation we saw er I was born in the eighties
681	I	yeah
682 683	P11	so I was born when this er capitalism lost its sense
684	I	yeah
685 686	P11	and it just became about money ((inaudible)) without having much concern for purpose

687	I	yeah
688 689 690 691	P11	you know consumerism for consumerism and I always had a critical view about that er but but my first memory on sustainability was the UN conference in ninety two in rio
692	I	mhm
693 694 695 696 697 698	P11	so this was something I was nine years old and I have vivid memories of visiting the of visiting the fair of having the experiences of having my first cookbook my first vegetarian cookbook I'm not completely vegetarian but I eat a lot of vegetables
699	I	yeah
700 701 702	P11	so this was something that permeated me like this seed that forever er guided me in like this process
703	I	yeah
704 705 706 707	P11	so when I see I now have a kid I have a seven year old er daughter and so it's kinda it's kind of pointless to design something that won't give her the world that I want to give her
708	I	yeah
709 710 711 712	P11	I want my daughter to be able to go to the beach I want her to be able to go to the waterfall to see animals to do the travels I've made and to see that the world is crumbling
713	I	yeah
714 715 716	P11	you know that she might not able to see snow as it was before or to see er the sea as it was before this makes me very very anxious
717 718 719 720	I	yeah yeah no it's interesting that not everybody sees it this way though and we have to try and convince a lot of people of the importance of it all yeah
721	P11	yes and I'm very sorry someone's calling me
722 723 724	I	that's okay I mean if you want to go we're pretty much finished if you want to go now that was that was really useful
725	/end/	