

# FROM HYBRID SPACES TO EXPERIENCING AUGMENTED PLACES

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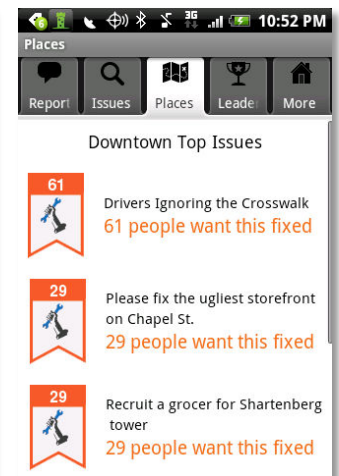
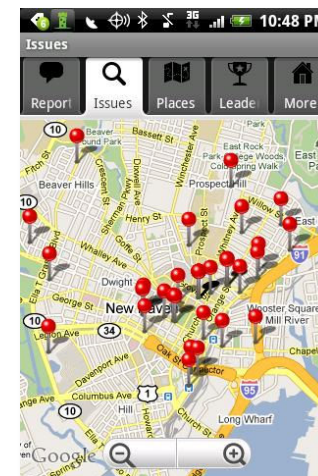
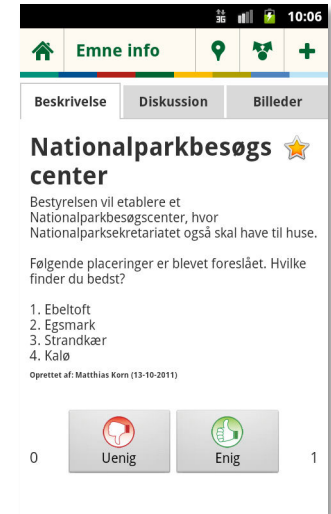
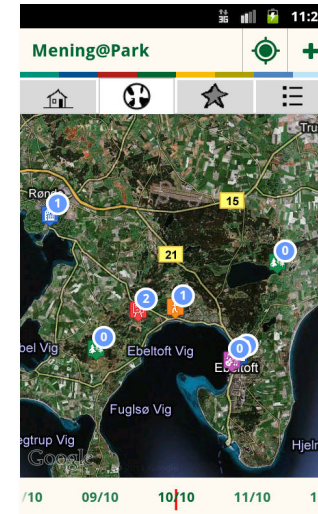
[HTTP://CS.AU.DK/~MKORN/](http://CS.AU.DK/~MKORN/)

@MATSCH\_o0

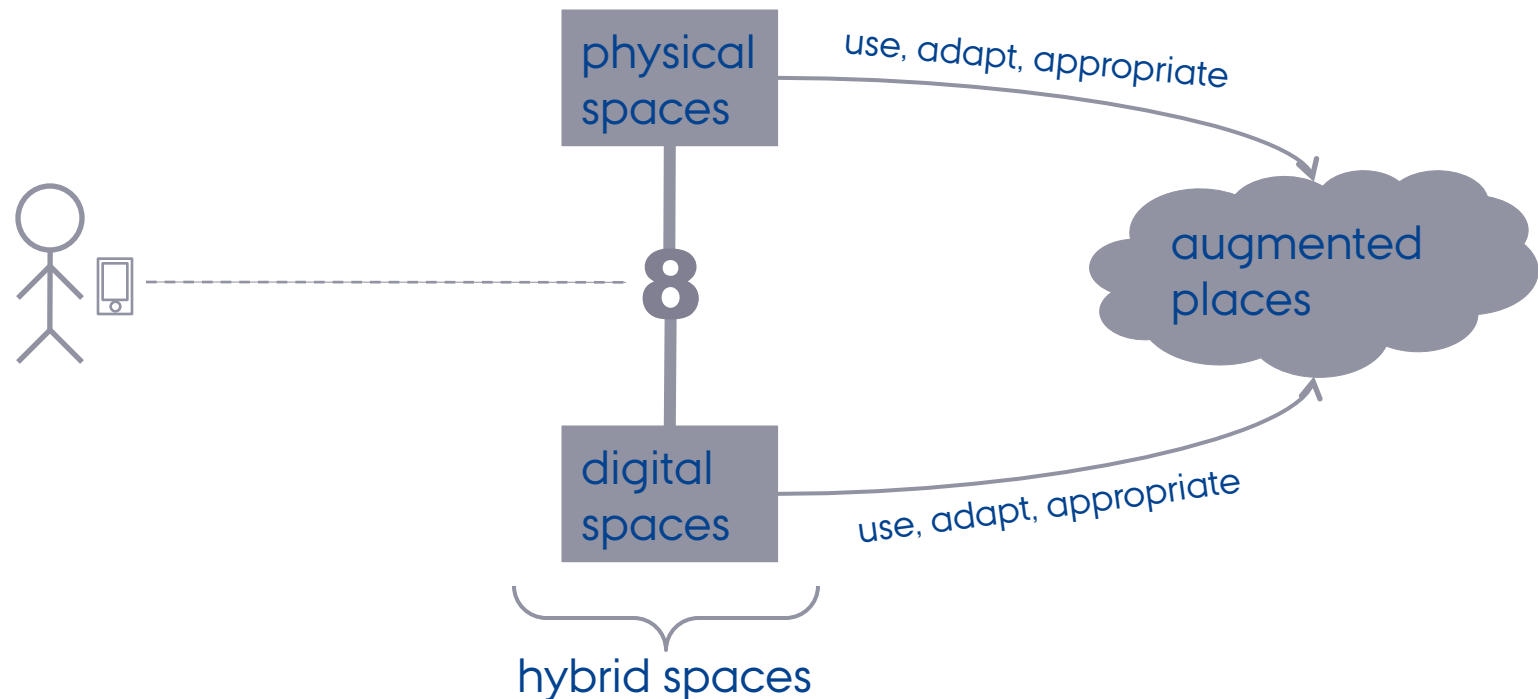


# SITUATED DELIBERATION

- › Mobile location-based systems in the domain of participatory land use planning
  - › Topics have a central spatial reference
- *Does 'being there' add something new or different to the discussion?*



# CONCEPTUAL FRAMING



# FRAMING / CONCEPTUAL MODEL

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- › Space is the physical 3-dimensional environment (the opportunity)
- › Places are spaces invested with meaning and understandings that frame appropriate behavior (the social reality)  
– Harrison & Dourish 1996
- › “Hybrid spaces arise when virtual communities [...] migrate to physical spaces because of the use of mobile technologies as interfaces.”  
– de Souza e Silva 2006

# RESEARCH QUESTIONS

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- › How do users make that link between physical and digital spaces?  
How is that link mediated by technology?
- › How can we conceptualize augmented places?  
How are they perceived by users?

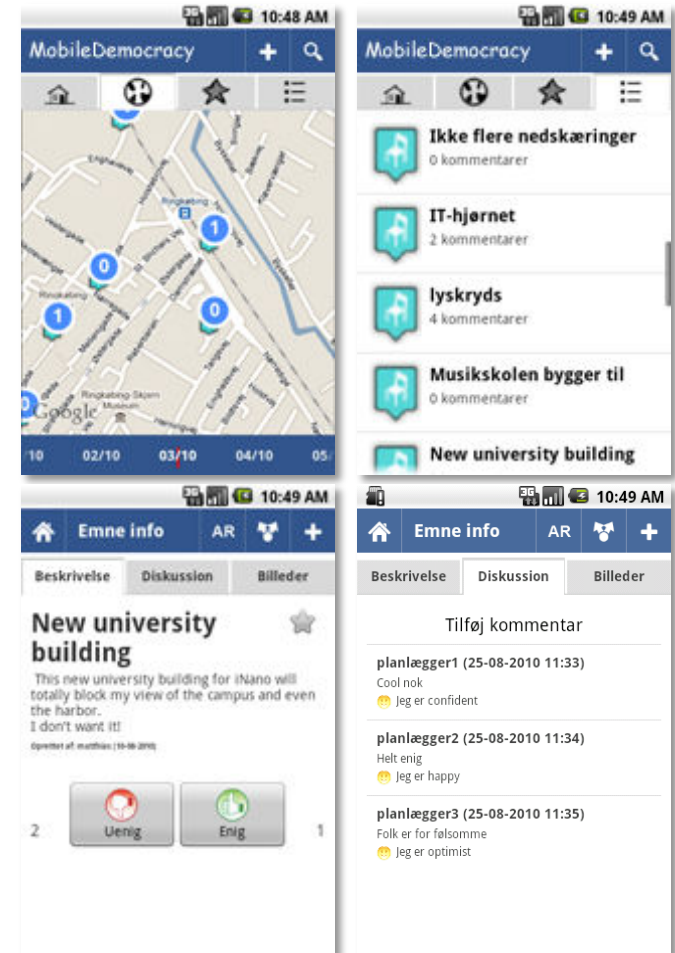
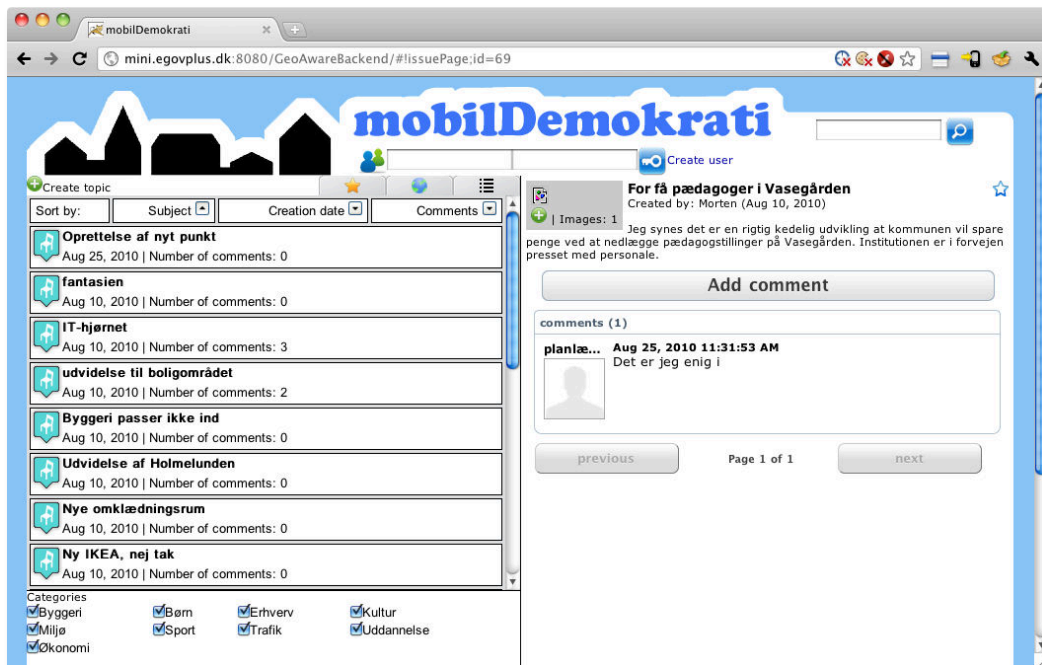
# CASE 1: MOBILE DEMOCRACY







# CASE 1: MOBILE DEMOCRACY



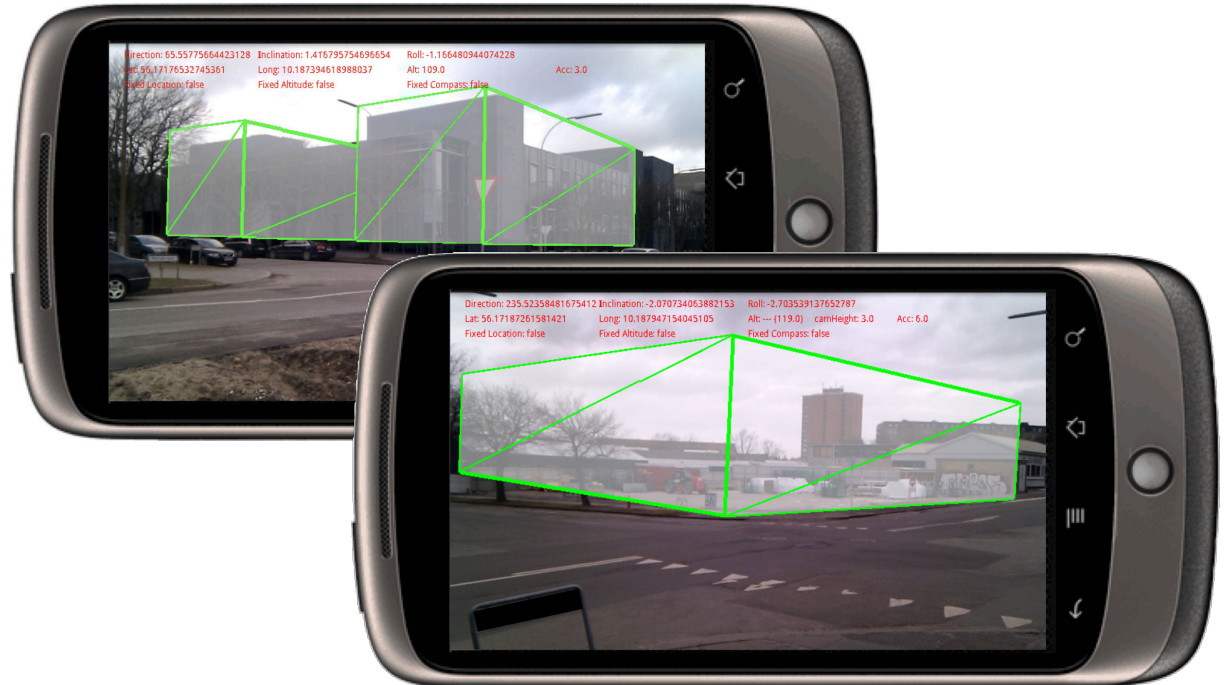


# CASE 1: QUESTIONS

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- › What is the distinct quality of a citizen “being there”, of “being in place”?  
How does it differ from being remote?
- › How can we exploit this quality and design for it?

# CASE 1: EXAMPLE – AUGMENTED REALITY



# CASE 1: EXAMPLE – MOOD

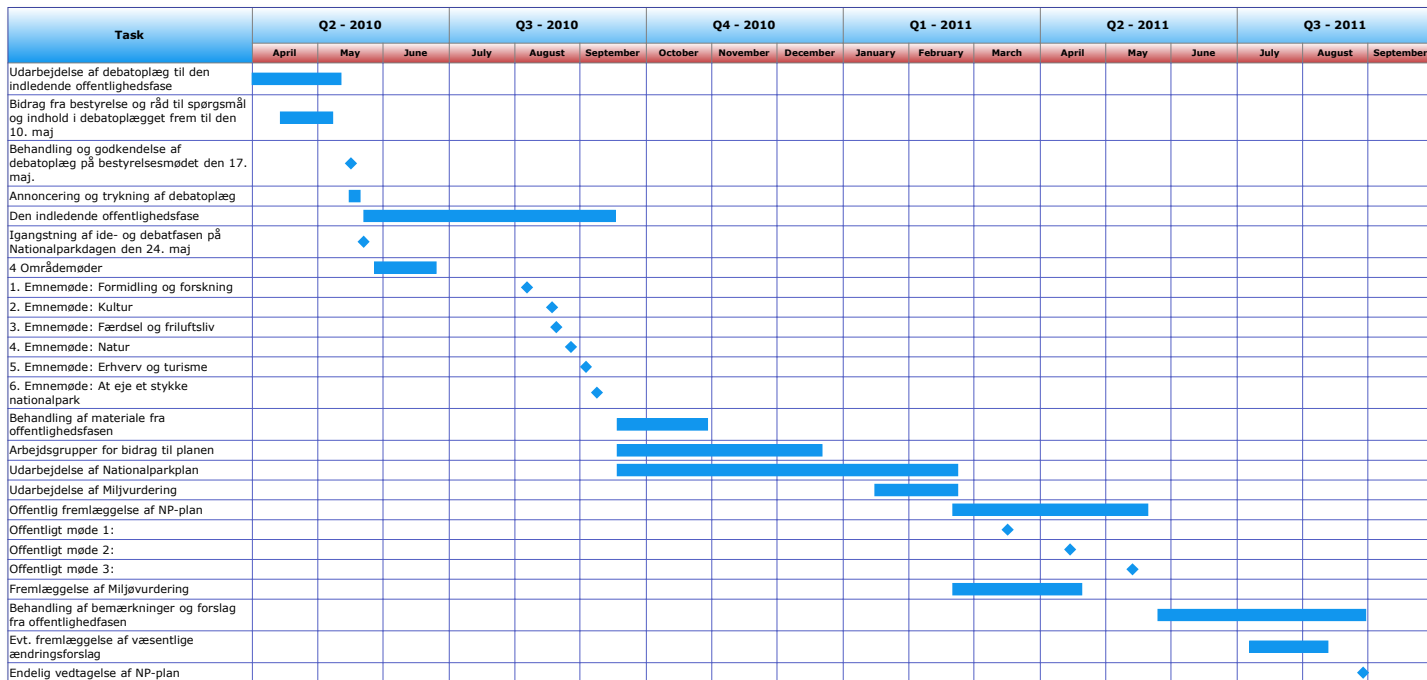
The screenshot shows a mobile application interface with a status bar at the top displaying signal, Wi-Fi, battery, and time (16:28). The app has a blue header with icons for home, 'Emne info', AR, a person icon, and a plus sign. Below the header are three tabs: 'Beskrivelse', 'Diskussion', and 'Billeder'. The 'Diskussion' tab is active. Under this tab, there is a text input field labeled 'Tilføj kommentar' containing the text 'No!'. Below the comment field is a question 'Hvad føler du omkring dette?' followed by three yellow circular icons representing different moods: a happy face, a sad face, and an angry face. Below these icons is another text input field labeled 'Jeg er' containing the text 'shocked'. Below this field is a list of example words: 'f.x. [eager](#), [anxious](#), [worried](#), [alarmed](#), [shocked](#)'. At the bottom are two buttons: 'Gem' and 'Annuller'.

# CASE 2: MENING@PARK

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# CASE 2: MENING@PARK

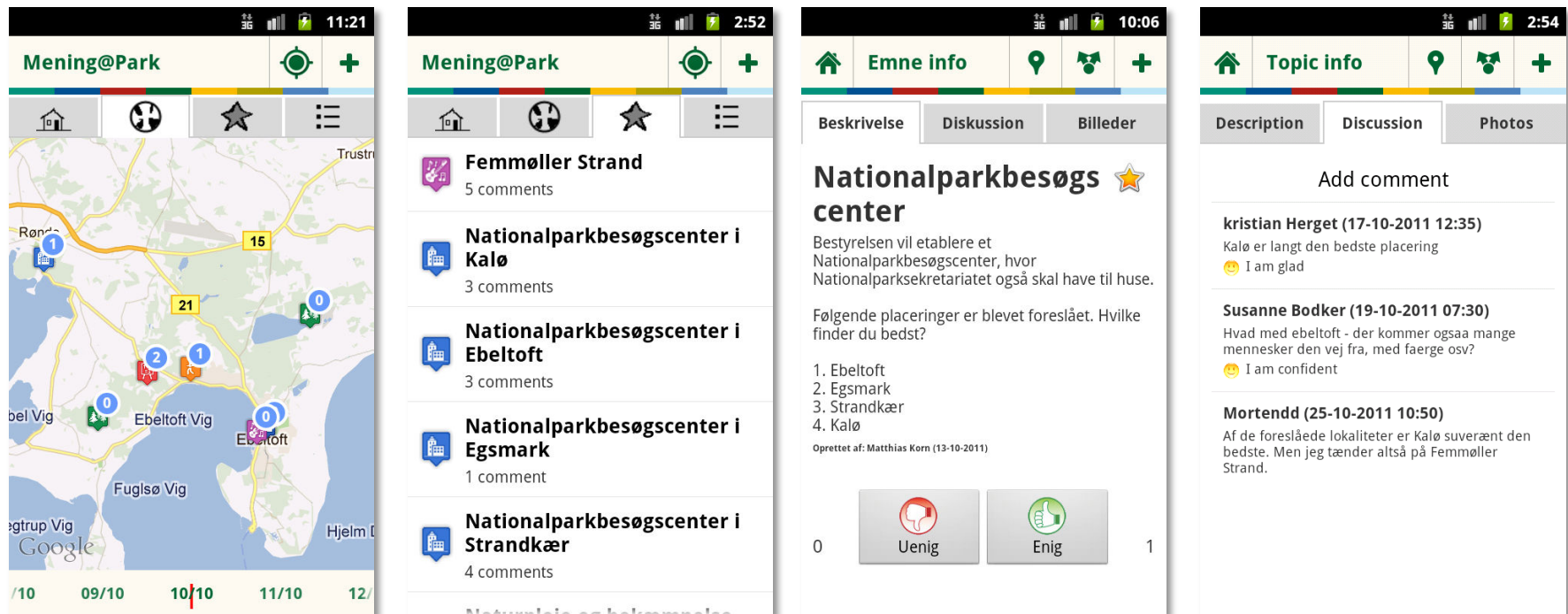




## CASE 2: MENING@PARK



# CASE 2: MENING@PARK





## CASE 2: QUESTIONS

- › How can we facilitate citizens to make links between physical and digital spaces?
- › How can a discussion topic be intimately tied to a place?
- › How can people explore, find and access discussion topics that refer to physical spaces?
- › How can the place be represented in each topic?

Hvad er din mening om stedet?  
Hvad mener de andre?

Nationalparkbesøgscenter i Kalo – et Mening@Park diskussionsemne



Scan denne QR kode med din smartphone til at deltage i diskussionen.  
Brug f.eks. Google Goggles, Barcoder Scanner eller QR Droid fra Android Market.



## CASE 2: QUESTIONS

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# CASE 3: USER STUDY ON FOURSQUARE

## Two part study:

I. Via text messages for in-the-moment realizations of experiences

II. Deferred contextual interviews for more in-depth accounts

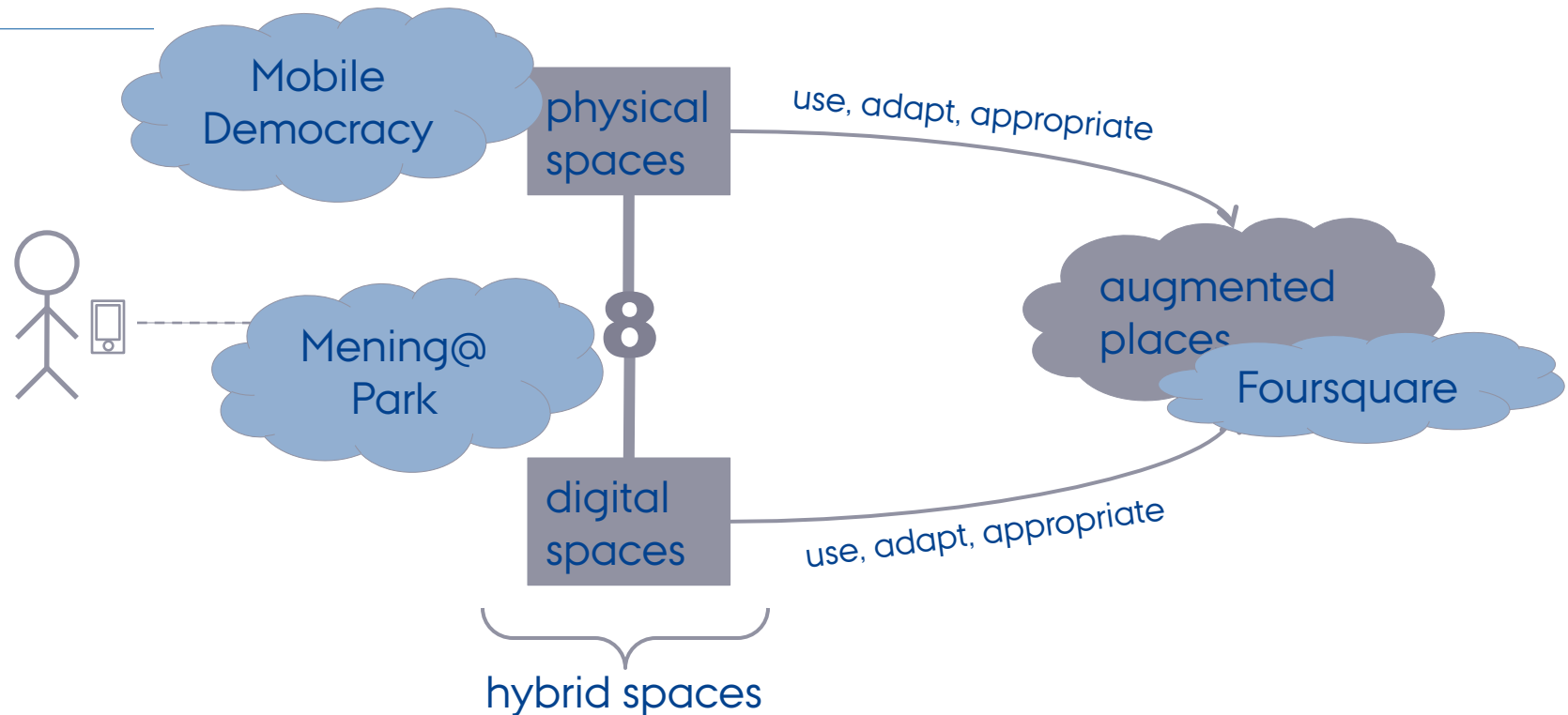
		Sheets		Charts		SmartArt Graphics		WordArt		M		N	
1	A	C	D	E	F	G	H	I	J	K	L	M	N
	checkin, hr	question, hr	response, hr	response, date	venue name	venue address	venue category	g	g	g	g	mm, question	mm, answer
488	Sun, 09.10.11 14:17:43	Sun, 09.10.11 14:17:44	--	--	Shibuya109	Aarhus	Place	0	0			Hvordan eller på hvilken måde tror du, at du setup har anvendt med dette (rødsk) ved igennem Foursquare?	
489	Sun, 09.10.11 14:20:47	Sun, 09.10.11 14:21:00	0:01:34	--	Via Sant'Alexandro			0	0			Hvordan tror du at du har brugt til dette med på Foursquare (tips eller studer) vil påvirke andre Foursquare brugere?	Det ved jeg ikke - det er i Italien, og jeg ved slet ikke, om de bruger Foursquare
490	Sun, 09.10.11 14:46:42	Sun, 09.10.11 14:46:43	--	--	Madens & Møllers	Bogensegade 2, st., København	Home	0	0			I am listening to DR P1 Dokument	Hvordan mener du dette check-in vil eller kan påvirke det rødsk med du checkede in på?
491	Sun, 09.10.11 14:56:15	Sun, 09.10.11 14:56:13	0:02:02	--	Flakkeby Studio 1	Finsbøym 23, Aarhus	Event Space	0	0				Hvordan mener du dette check-in vil eller kan påvirke det rødsk med du checkede in på?
492	Sun, 09.10.11 15:29:51	Sun, 09.10.11 15:29:51	--	--	Universitetsparken	Victor Albeck's Vej, Aarhus	Park	0	0				Hvad eller hvordan er dine følelser omkring dette sted?
493	Sun, 09.10.11 15:29:57	Sun, 09.10.11 15:29:57	--	--	Home of the Rising Sun		Home	0	0				Hvordan tror du det har påvirket parterne du kender, hvor ofte du checkede in her?
494	Sun, 09.10.11 15:36:31	Sun, 09.10.11 15:36:31	0:03:24	--	Odenegade 1, København Ø	Coffee Shop		0	0				Beholdt hvordan du mener Foursquare har medført eller forhindret i kommunikation med dette sted?
495	Sun, 09.10.11 16:30:31	Sun, 09.10.11 16:30:31	--	--	København 2	Nach Hansen Vej 6, Aarhus C	Coffee Shop	0	0				Hvordan eller på hvilken måde tror du, at du setup har anvendt med dette (rødsk) ved igennem Foursquare?
496	Sun, 09.10.11 16:50:23	Sun, 09.10.11 16:50:28	0:05:05	--	Det Nye Længernes Bageri		Bakery	0	0				Hvorfor checkede du in her og nu?
497	Sun, 09.10.11 16:52:39	Sun, 09.10.11 16:52:48	0:00:09	--	Odenegade 120, København Ø		Train Station	0	0				Hvordan eller på hvilken måde tror du, at du setup har anvendt med dette (rødsk) ved igennem Foursquare?
498	Sun, 09.10.11 17:27:50	Sun, 09.10.11 17:28:00	0:00:10	--	Frøen		Grocery Store	0	0				Hvad betyder dette sted for dig, siden du offentliggjorde dit check-in til venner på Foursquare?
499	Sun, 09.10.11 17:44:19	Sun, 09.10.11 17:44:28	0:00:09	--	Væksthuset RABO		Day Cleaner	0	0				Hvordan mener du dette check-in vil eller kan påvirke det rødsk med du checkede in på?
500	Sun, 09.10.11 17:57:47	Sun, 09.10.11 17:57:48	0:00:01	--	Bibo-Mix Club	42b, L. S. Aarhus	Home	0	0				Hvordan mener du dette check-in vil eller kan påvirke det rødsk med du checkede in på?
501	Sun, 09.10.11 19:20:03	Sun, 09.10.11 19:20:08	0:00:05	--	Bogensegade 2, st., København		Home	0	0				I am listening to DR P1 Religiøsitet
502	Sun, 09.10.11 19:32:32	Sun, 09.10.11 19:32:38	0:00:06	--	Madens & Møllers		Home	0	0				Hvordan mener du dette check-in vil eller kan påvirke det rødsk med du checkede in på?
503	Sun, 09.10.11 19:35:52	Sun, 09.10.11 19:35:59	0:00:07	--	McDonald's		Restaurant	0	0				Hvordan tror du at du har brugt til dette med på Foursquare (tips eller studer) vil påvirke andre Foursquare brugere?
504	Sun, 09.10.11 20:23:48	Sun, 09.10.11 20:23:51	0:00:03	--	København 2, st., København		Home	0	0				Hvad eller hvordan er dine følelser omkring dette sted?
505	Sun, 09.10.11 20:28:24	Sun, 09.10.11 20:28:29	0:00:05	--	Madens & Møllers		Home	0	0				Hvordan tror du at du har brugt til dette med på Foursquare (tips eller studer) vil påvirke andre Foursquare brugere?
506	Sun, 09.10.11 21:09:26	Sun, 09.10.11 21:09:29	0:00:03	--	Flakkeby Studio 1		Event Space	0	0				Hvad eller hvordan er dine følelser omkring dette sted?
507	Sun, 09.10.11 21:24:59	Sun, 09.10.11 21:25:00	0:00:01	--	Universitetsparken		Park	0	0				Hvordan mener du dette check-in er meningfuldt?

# CASE 3: QUESTIONS

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- › How are augmented places perceived and experienced?
  - › “There were also other [tips] and new images, so the perception of the place is changing in that it has good connection between the physical place and Foursquare.”
  
- › Do people think their actions on Foursquare have any kind of impact in the physical world or on other people?
  - › “It does not change the physical environment, I think.”
  - › “Today, I’m late, so my group can see, I’m there in a minute if they want ...”
  
- › How is the link between physical and digital spaces mediated by technology?
  - › “I just got a workout badge with a small comment and they have written something funny about working out before. So I think that Foursquare manages it better than the [fitness] center does itself.”

# SUMMING UP



# CONCLUSION

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- › Through mobile location-based services, physical spaces become increasingly expanded by digital spaces.
- › Places are augmented due to the additional source of experiences emerging from the digital realm.
- › Utopia: amplified experience & enhanced reflection leads to augmented action possibilities in deliberation
- › Dystopia: disconnected and numb experience & lack of reflection leads to superficial deliberation



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# DISCUSSION

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- › What kind of quality does the digital realm add to our everyday experiences?
- › What kind of quality does it add if technology facilitates direct linking to the physical realm?
- › What does all this mean for citizen involvement and deliberation?

# PHOTO ATTRIBUTIONS

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