

Context of project

The crossover between interaction design and zoologist animal behaviour that is applied to develop designs for animals interacting with technology.

What is the problem/debate/focus

I want to explore how interaction design by means of collaborating with Zoologists, using theories of ethology based on dogs, can be applied to create an animal user interface that addresses issues in their lifestyle or behaviour.

This may be applied to issues raised in stray dog areas, where adoption can be improved by assessing issues in animal health and behaviour.

What do I plan to work on?

I will provide contributions through methods and applications of interactive media and designs that can be applied, based on animal behaviour observed by Zoologist based on theories of canine ethology.

Merging Interactive Design with Canine Ethology

By Shane Smidt



Collaborative Partners



Shane Smidt: (Interaction Designer)
My name is Shane Smidt, an interaction design Student. I will be contributing my skills in interaction design to identify how theories and experiences in animal behaviour can be used to create a method for helping dogs adjust and follow health routines with the help of my partners.

Cindy Smidt (Zoologist)



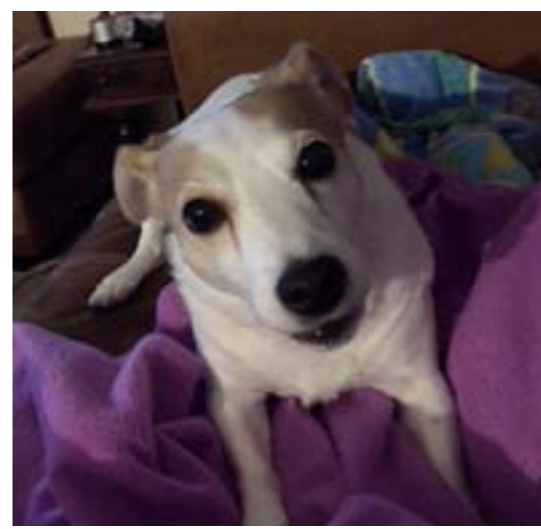
Cindy Smidt is a zoologist, with 5 years of experience as a pet care adviser with a extended Diploma in Animal Management with a Bsc Hons Degree in Zoology.

Charlie Smidt (Zoologist trained Dog)



Charlie is a particularly energetic dog, trained with strict and health routines with the expertise of Cindy Smidt. Charlie is a health and well adapted dog to be used as a model of animal behaviour that Cindy has put into practice.

Bob Smidt (Adopted Rescue Dog)

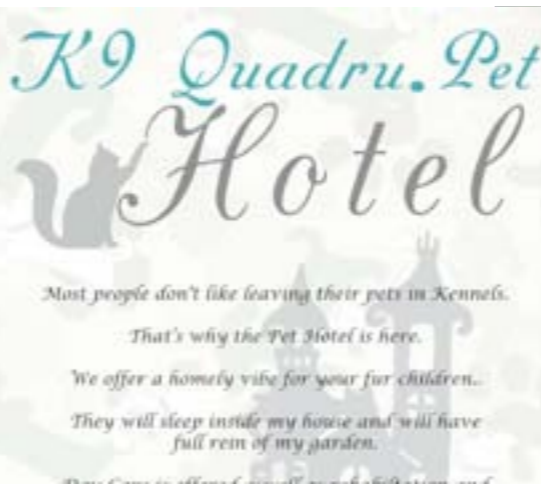


Bob was a Rescue dog that we welcomed into the family, contributing a perspective of a dog that adapted to a new environment

Jasper (strangers Dog)



Jasper's family (owners) left him with us to briefly take care of and as such contributes the behaviour of a dog in a new environment



Colleen Keyser (Animal adoption)

Colleen runs her own animal care home called K9 Qyadra. Pet Hotel. Where stray dogs are found, traeted and found new homes.

She will be providing expert advice in rehoming dogs.

Animal computer interaction Design Approach

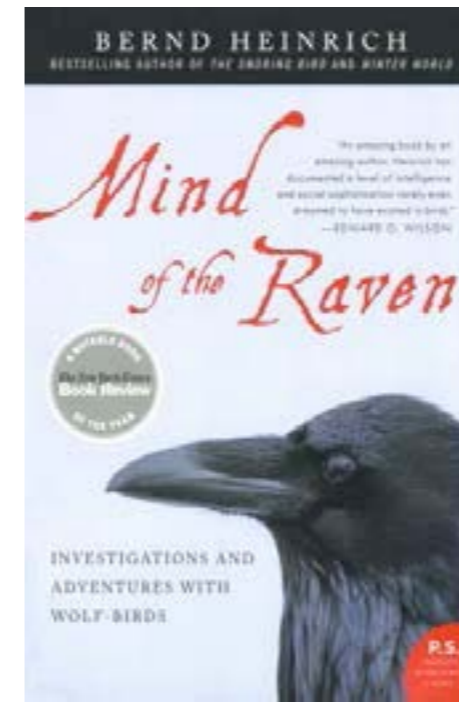
Design approaches similar to the crossover between interaction design and zoologist animal behaviour that is applied to develop designs for animals interacting with technology.

Animal Computer Interaction Design

Ilyena Hirskyj-Douglas and Janet C Read
University of Central Lancashire in Lancashire*



Figure 1: (a) A dog involved in the study watching a video (b) A graph showing the dog's relationship between the video interaction content and the time spent viewing the video with a straight linear trend line showing positive correlation.



Raven book on ethology



What is animal interaction design?

Animal Computer Interaction (ACI) is research focusing on the design and use of machines for animals, particularly on the interface and how the animal can interact. This can be done by both observing the way animals use computers and designing computer machinery especially for an animal to interact with.

ACID Published Papers: Animal Computer interaction design by ACID

ACID research has so far creating methods to allow dogs to take a role in the technology design to create meaningful interactions and creating a head tracker to allow dogs opinions to be shown through biometrics. This work is centered on creating media that a dog can interact with, in a similar fashion to humans do with keyboards and remotes, to see what a dog likes to watch, if they can choose to watch and interact with a technology system

Ethology from Mind of the Raven

This Book details the life and experience factors that effect the behaviour of ravens from a human point of view, giving an alternative perspective to the life of the raven.

Ethnological approach for dogs

This is a brief paper written by te animal behaviour associates, describing the ethnological behaviour of dog behaviour from a human point of view, allowing the research of human centred design to have similar crossover applications.

Collaborative animal Shelter Company

Colleen Animal Shelter expert

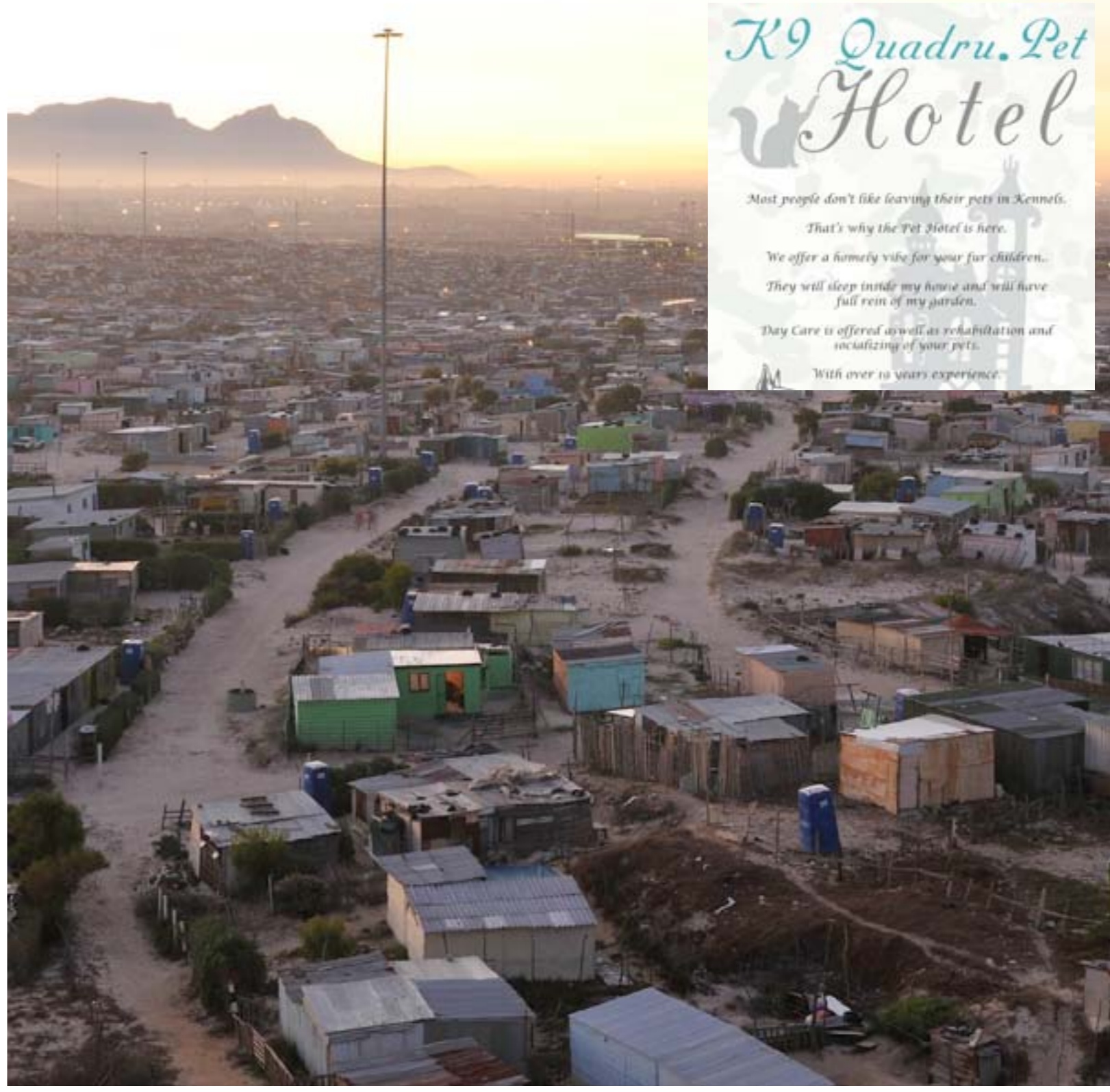
The method for rehoming and helping dogs adjust to new environments has applications for support locations such as my Aunty Colleen's animal shelter.

The animal sheltered here receive basic training, however often have bad and unhealthy habits prior to being found.

Creating a need for a method of interaction that helps them adjust.

See Blog for Colleen's advice on rehoming dogs

Local stray animals sheltered



K9 Quadru. Pet Hotel

Most people don't like leaving their pets in Kennels.

That's why the Pet Hotel is here.

We offer a homely vibe for your fur children..

They will sleep inside my house and will have full rein of my garden.

Day Care is offered as well as rehabilitation and socializing of your pets.

With over 10 years experience.



Problem surfacing

Animals health deterioration, supporters are decreasing and current residence do not possess the expertise to address issues.

Food, Water and sanitation issues



Animal Shelter Expert Feedback

Colleen has informed me of the issues in health, mentioning that pets are territorial and the interaction must help the dogs adjust to a healthy food, sleep and exercising routine.

Conclusion

I should look into Interaction design devices where the animal needs are addressed based on animal behaviour.

**Collaborate commercial products:
Animal Computer Interaction Design**

Collaboration with UXPA

Following Colleen advice, I looked into animal centred interactive devices and got in contact with UXPA via email (look to the left) and they referred me to projects that they and similar designers have created



Research and Analysis of animal interactive devices

I have Observed devices Designed for Dogs and How to design for users that don't speak, demonstrated by member of ACID and UXPA

Canine Interaction Pressure pad

This Pad uses sound based feedback to entertain the dog, similar to colour memory games used for humans to keep them engaged and avoid depression.



influence: human games can be applied to dogs

Canine Emotion Collar Sensor

This collar keeps track of the heart rate of the dog and uses animal behaviour research to inform the owner of the dogs emotional state.



Influence: using objects dogs are familiar with to address needs.

Talk Talk Animal interaction device

The Talk Talk device that uses animal behaviour research on dogs tails to read and translate their movements into emotions that the owner can understand.



The tail is the dog's social interface,
like a smile for humans.
**UNDERSTANDING THE TAIL MEANS
UNDERSTANDING THE DOG.**

Influence: Animal behaviour can be used to help owners connect and understand their dogs

Emails shared with representative of UXPA

On Tuesday, 16 February 2016, Shane Smidt <donotreply@eventbrite.com> wrote:
Shane Smidt (smidtvision@gmail.com) has a question for you about your event And Now for Something Completely Difficul

Hi, I am a MA student conducting a course in interaction design, my current project follows the interaction design associated use. I have purchased a a last minute ticket today, however a confirmation was not sent with the ticket. Would there still be guidance the seminar may influence my project and future profession.

This message was sent to you via Eventbrite.

Caroline Owen <carolineowen88@gmail.com>

to me

Hi Shane,

I don't see your name in my list of attendees. Are you sure you completed the transaction? Please try again.

Thanks,
Caroline Owen
UXPA UK Events Manager
Tesco UX Researcher

Caroline Owen

to me

Hi Shane,

I'm sorry there was an error with the purchase. Eventbrite will always give you an immediate on screen confirmation when you purchase a ticket. This is then followed up with an email from Eventbrite and from PayPal for the transaction. If you did not receive any of these, the purchase was not processed. Unfortunately, we have no record of you purchasing a ticket for this event.

We are not able to release any further tickets at this point. My advice would be to tweet at @UXPAUK asking if anyone wants to transfer their ticket to you. We'll RT it from our account. If it helps, the talks will all be filmed and available on our YouTube channel after the event.

Feb 16

Reflection of Caroline Owen's suggested research

Though Caroline was not able to help me attend their seminar, She pointed me in the direction of design methods for users that dont speak

Subject knowledge application

these dog user designs inspired me to look into theories that show the world through the animals eyes.

Research and analysis: Life in the eyes of a cat

introduction to The Lost Cat perspective

I was inspired by how UXPA designers understood the perspective of the dog, leading me to read a book called lost cat by Caroline Paul. The Book describes the way a cat see's a new and explores a new environment

Analysis of interaction design applications

The book shows how a cat explores and unknown environment I think that this would be ideal for conducting a survey on how a dog adjusts or moves with in an unknown environment

Meeting 1: Conversation with Zoologist

If we were to map out the area a dog likes to visit what do you think those key locations ?

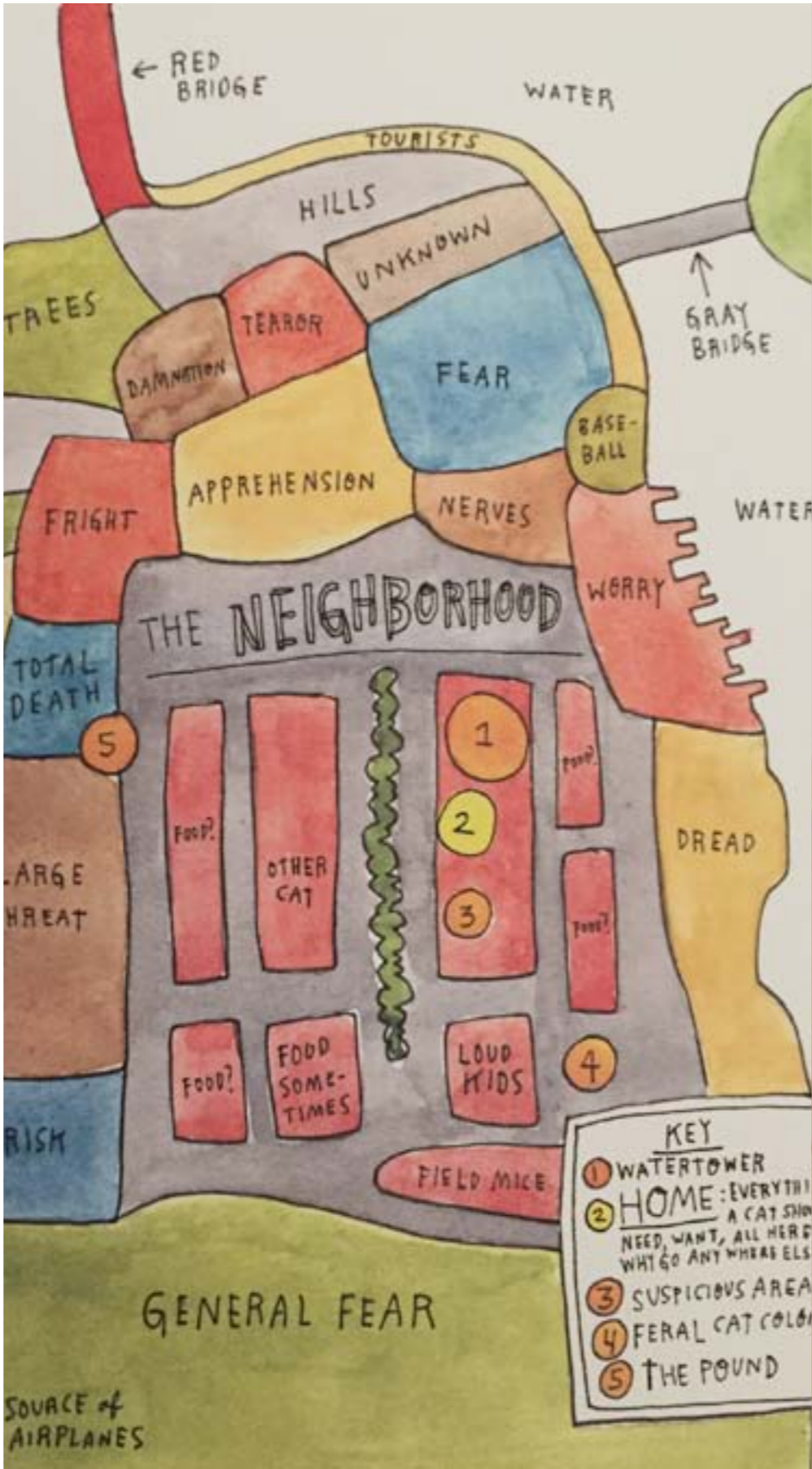
They will generally stay closer to their pack leader. Dogs will also scent mark in the new location as this will help guide them home, and send a message to other dogs to state that they were there and possibly that it is now their territory.

Zoologist advice on dogs emotional state

“Generally the further away from the animals ‘safe location’, such as their home, the more anxious and nervous the dog will become. Just as humans would become ‘home-sick’, a dog will as well with the loss of familiar.”

Subject knowledge application with dogs point of view

The book shows how a cat explores an unknown environment and I think that this would be ideal for conducting a survey on how a dog adjusts or moves with in an unknown environment



Collaborate project: Interaction survey method

Applying Ideo survey with animals as users

Ideo methods of observation, allow a deep understanding of the needs of the user and I believe that using the values and needs of animals may provide the opportunity to understand what would make their lives better

Application dog Talk Talk subject knowledge

Talk talk device used animal behaviour that they related to human emotion, to allow the owner to better communicate with their dog.

I applied that knowledge to using ideo surveys meant for humans to understand the dog.

Zoologist Collaborative advice

This survey method (a day in the life) may be effective, however you should follow The dogs daily routine.

*Regular walks
Safe zones
Good nutrition*

Potencial use of "A day in the life method"

The Day in the life survey method applies human surveying to dogs, demonstrating how similar our life styles may be.

However more discussion with Zoologist is needed to understand how to survey a dog

A Day in the Life

HOW: Catalog the activities and contexts that users experience throughout an entire day.

WHY: This is a useful way to reveal unanticipated issues inherent in the routines and circumstances people experience daily.

IDEO asked potential wearers of a drug-delivery patch to document their daily behaviors including those that might affect the function of the patch – getting wet, snagging on clothing, etc.



Collaborate meeting 1: Plan Mapping out animal movements

Purpose surveying animal movements

Inspired by the connection between research methods of zoology and interaction design, me and Cindy will discuss how to survey Bob the dog

Application of Zoologist subject knowledge

Input from the zoologist demonstrates that an observation, of Bob as she moves along a floor plan to safe zones will be the best way to understand the dogs natural routine

Scouting through observation



Mapping animal movements



Lost Cat GPS tracking



Zoologist advice on Monitoring locations



Safe distance

It is best to keep a distance when observing the dog.

Planning Household Location

I know from observing Bob that she likes to have her own personal space I know Charlie is more welcoming.

Zoologist response to GPS

Tracking only gives partial understanding of where the dog walks and doesnt capture the resoning and response the dog had to thouths locations

you should conduct the survey through observation

Locations likely to visit

Safe Place – only other animals or humans can enter this space if respected by the dog. Such as, once again, the pack leader. This can also include other animals, such as the image below:

A dog is generally attracted to the kitchen as this is the source of food.

Many dogs will also find comfort in the lounge as this is a good guarding location, central to the house where they can easily observe what is occurring within their environment, in and around the house.

Collaborate meeting 2: Discussion On findings

After the Survey I met up with the zoologist where we discussed the behaviour of the 2 dogs and possible design approaches

Collaborated reflection on Caning movement mapping

Me - we need to get into the mind of a dog, how does its movements relate to what we would feel

- dogs enjoy sleeping and sleep 3/4 of the day,
- dogs react to the alpha and react to their tone of voice and gestures
- dogs like to follow a routine, either that routine is one they find for themselves or trained

Response to similarity

Me - like how people wake up late, search for breakfast and look for their fellow family member, and they way we as humans follow that routine is based on our own training

- yes, you could look at it from that perspective

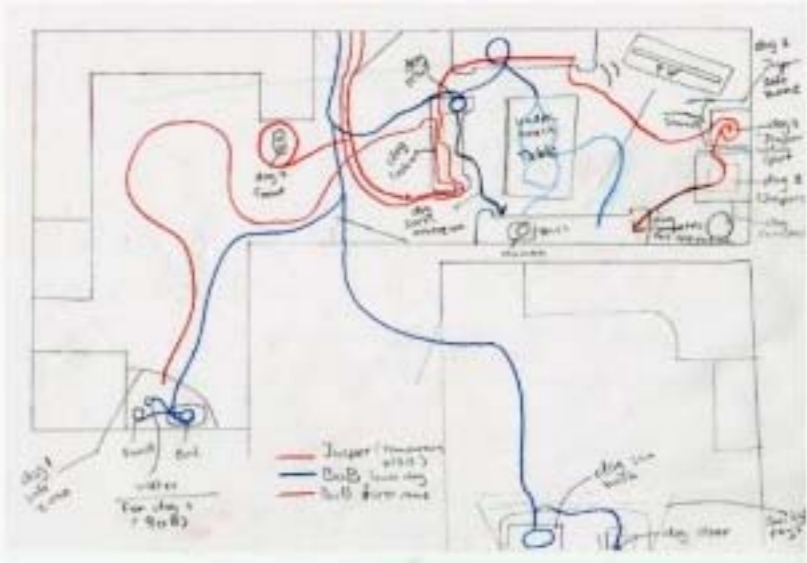
Suggest interactive survey

Me - the as an interactive experience, I will follow the dog and give my voice to what I believe a dog would be thinking

- then I will take pictures of my own dogs routine and tell you what I think they are thinking
- me - great we can compare the experiences

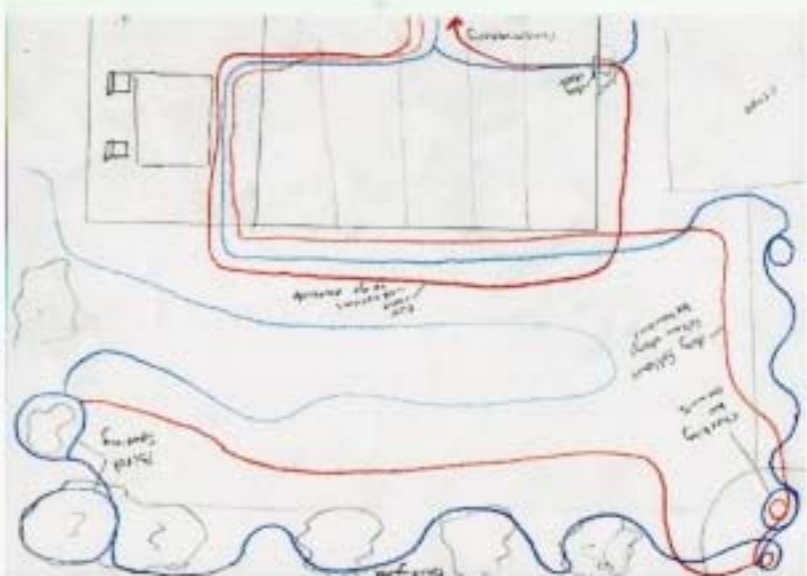
Canine exploring new areas

The survey showed that Bob upon her first visit first moved towards the coach to gain a perspective of the surrounding, similar to how humans want to have a look over a large area from a high pint of view. Bob then as she moved around the room choose to find places in corner areas, once again similar to how certain people like corner areas of a room. Jasper the second dog mimicked the same behaviour and finding safe zones. As time progressed we noticed that these safe zones over time are the areas that the dog likes to sleep and eat, no different from how humans develop a attachment to spots on a coach (big bang theory Sheldon).



Backyard behaviour

Both dogs demonstrate that upon a first visit they do not explore as frequently, however as they interact with the environment, the feel the need to explore and keep it safe by regularly checking that birds and other animals are not intruding in the place they made home.



Analysis on Human an animal similarity

A dog will not overthink its behaviour, it will merely act as it feels it should. Such as liking something, where a human might 'act' as if they like something and possibly not actually, with a dog you would easily be able to see if it likes it or not. However, both humans and dogs can be 'trained' to like a certain something, this is usually done through nurture but nature can take over from this as well.

[See Blog of animal movements](#)

Collaborate project: ANIMAL THEORY AND BIG BANG DATA INFLUENCE

The Visit to Big Bang Data

Taking into account the theories of ethology to look at the dogs from a human perspective, I chose to visit the Big Bang Data exhibit to view how data was collected on humans, and found a specific design that showed the movements they made within the actual exhibit.

Comparison between Human and animal behaviour

After conducting a survey with the dog on its movements I found that humans move very similar way as I saw in an exhibition that tracks visitors' movements. I believe that if we shared the same interest as the dog we would act the same way.

Such as our dog will rush to a bush to peak curiosity, whereas we would move to columns of history or art to see what is on.

Zoologist thoughts on behaviour similarity

What are your thoughts about this?

"I believe that dogs are a lot more expressive than humans. They display body language which is simpler to interpret than that of humans which are complex and secretive."

Conclusive comparison of human and canine movements

Humans similar to dogs are drawn to areas of curiosity, demonstrated by this image showing how humans move within a space, similar to how a dog looks through bushes to peak interest.

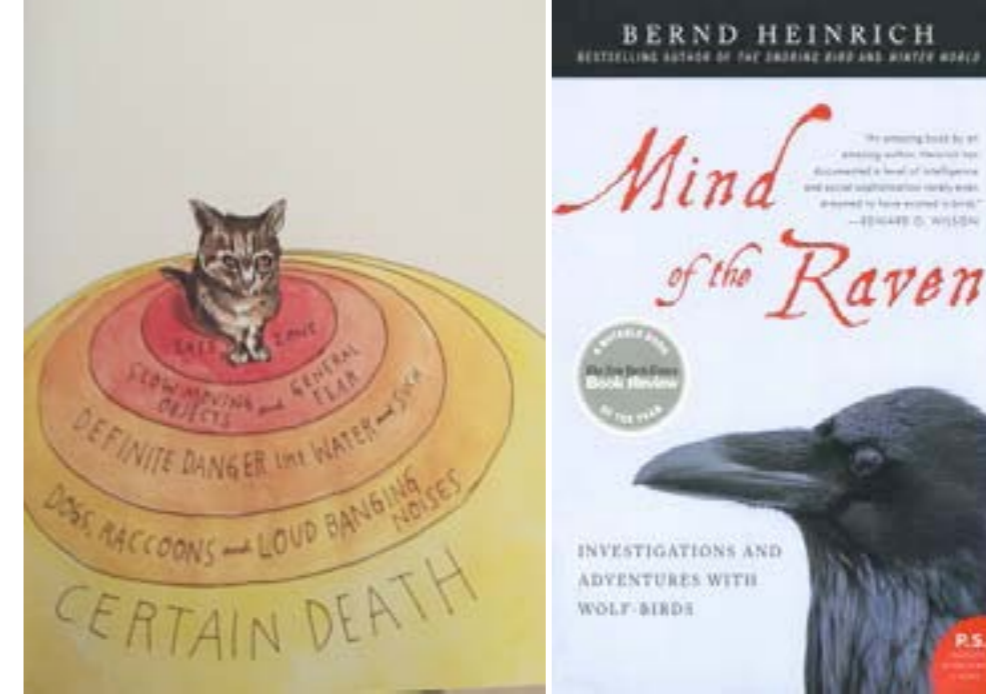


Collaborate meeting 3: merging perspectives

The Big bang data showed me how similar we may be, leading me to meet up with the zoologist to discuss other theories of ethology and the applications of it as a tool to understand dogs

Influence of Mind of Raven

I have been researching a book called mind of the raven it is a book with Ben and Henry uses a thorough tea to talk about how a raven in less than a human perspective.



Animal Perspective Questions

What is my dog doing right now?

Where is my dog?

Is my dog depressed?

Why is my dog peeing on the _____ Again?

Collabertive advice of merging perspectives

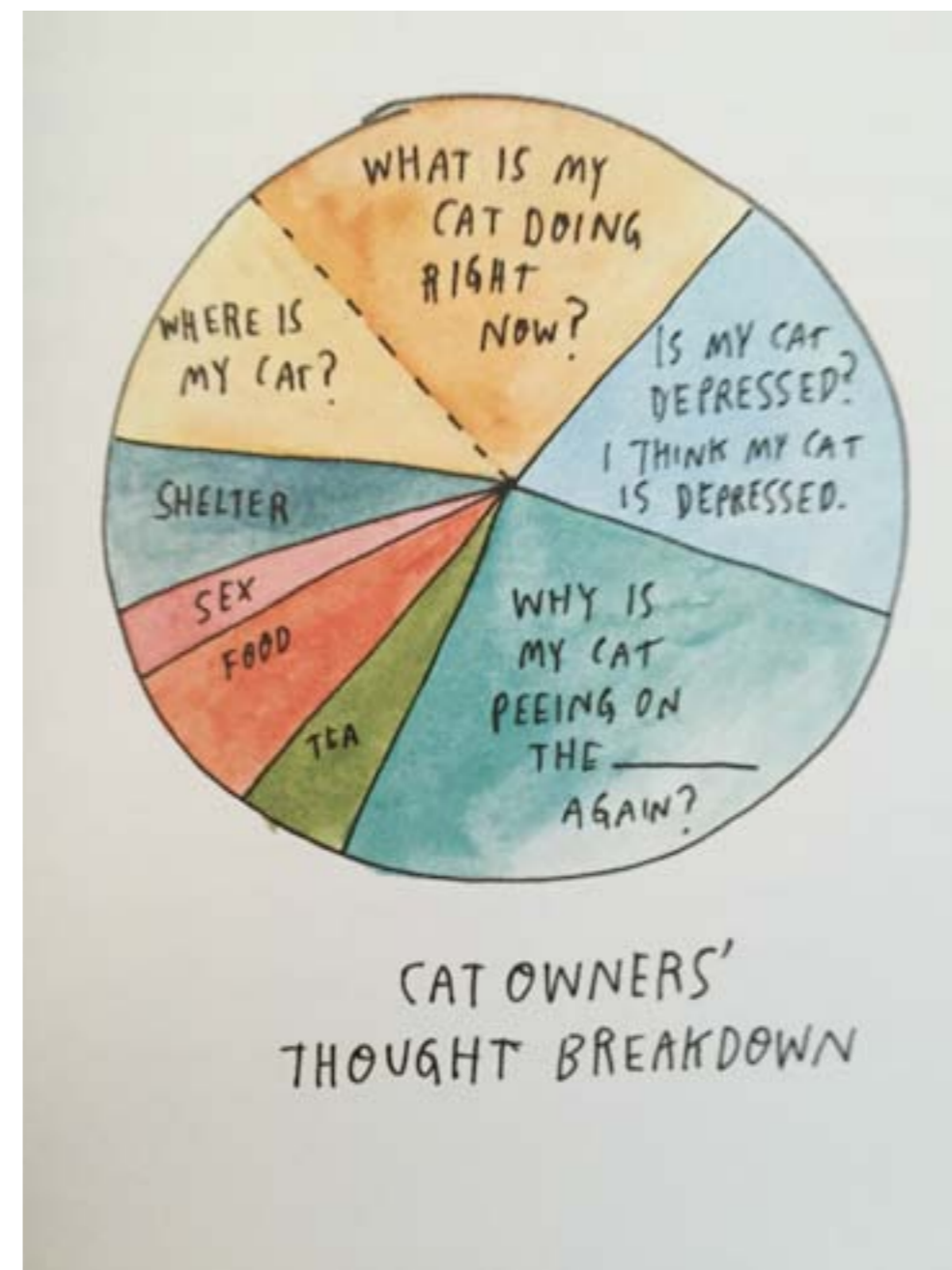
What do you think about applying this to dogs.

"This perspective should not be applied to dogs. Dogs are not human. Dogs and other animals should be seen as the animals that they are. Every living object has its own nature"

Conclusive plan for applying subject knowledge

The dog seeks approval but only from one individual, similar to a mother or father that a human looks up to.

I plan to create a walk through of this survey, because We believe that a walk through of these activities in the life of a dog would be engaging and educational because it leads them to think about what a dog feels



Collaborate project: APPLYING HUMAN PERSPECTIVE TO CANINES

Reflection of human to canine perspective

After conducting the behaviour survey, I mentioned to the zoologist that it was missing a speculative view of what the animals were thinking from a human perspective as it conducted. We considered what the dogs mind set was and what their needs are and voiced a speculation of what she would be thinking at the times of interaction.

Collaborative Discussion with Zoologist

What do you think about the entertainment people get from humanising their dogs?

I feel that this proves the connections people have with their animals. It has been shown in surveys before that people are attracted to animals that they can relate to, mammals specifically. The 'cuteness' of the animals is what relates to seeing a baby child. Animals will always bring us joy.

Visit Interactive Blog

Follow the interactions of the dog as we apply speculative design to animal behaviour and click on the sound attached below the image.

Conclusive experience identified

Spreading the blog to other people for input some compared it to the meme that have comedy statements on dogs

I have taken images of the dogs activities, surveying them using survey methods influenced from ideon life in the day of the user

I identified that the dog has morning activities just like a human does in their preparation of breakfast

BOB HAS WOKEN UP



BOB GOES FOR BREAKFAST



CONCLUSION

The above interactions takes you through what I believe a dog will interact with and the mindset she has as she goes through her day. The goal is to use this information to find a interaction method for design that takes into account the dogs pint of view to help dogs adjust and engage with new environments or better connect with their surrounding to avoid issues in their health and behaviour from developing.

FEEDBACK

Please if you are viewing this blog give your feedback to how you in the same situation would react and what you life as a dog would be like.

Collaborate meeting 4: Day in the life of a dog

Purpose of transferring human to animal Behaviour

I have surveyed a dog but now I feel it is necessary to understand their lifestyle as well.

I have met up with the zoologist to discuss how I may understand them through life as a dog.



Influence of Human as animal



Chase

Zoologist animal behavior advice

A dog will not overthink its behaviour, it will merely act as it feels it should. Such as liking something, where a human might 'act' as if they like something and possibly not actually, with a dog you would easily be able to see if it likes it or not.

However, both humans and dogs can be 'trained' to like a certain something, this is usually done through nurture but nature can take over from this as well.

Emerging in dog experience

Replicate the same points of interest as the dog, such as food, rest and fetching mail. Complete these experiences by walking on hand and knees.



Fetch stick

Possible application of knowledge

I believe from this discussion I should survey myself conducting the same actions as previously surveyed to understand what it feels like to move, eat and fetch mail under their circumstances.

Collaborate project: My day in the life of a dog

Purpose of Living as a dog

Inspired by the human life I portayed for Bob the dog, I felt it neccasary to conduct a survey where I live as a dog from her perspective

See Blog "its a dogs life for me" to see video

Research through design: The life of a dog as lived through a human

By experiencing lifestyle of a dog, I found that I still felt a need for food, sleep and interacting with points of interest (mail).

The lack of use of my fingers left me relying on my mouth and using such as fetching the mail.

without the use of kitchen tools I relied on my mouth alone to meet my hunger needs

Analysis and reflection of experience

Dogs may appear different but given similiar circumstances (as mentioned in the big bang data influence), we would behave in a similiar manner.

Conclusion application of animal experience

The experiance to act like a dog has given me the oppurtunity to touch on the importance of observing behavioural changes, minimal restraint and other techniques to minimise stress for animals.

strengthening human and animal bond



roaming the area



Eating food



Sleeping



Fetching mail

Collaborate project: Audience Feedback

What am I looking for?

This is an ongoing survey being conducted that takes in a collection of what people, both professional apologists and regular dog owner, think that their dog or the dog in general would think.

Purpose of receiving feedback

This survey puts together a database that clearly captures what people think of dogs behaviour, and by working with the zoologist we can identify what is a correct response

Analysis of other peoples scenarios

JJ has provided a more entertaining thought process for the dog that provides a sense of comedy.

Conclusive applications of feedback

The database can be used to create various scenarios of dog activities. i plan to apply jj thoughts to my own scenarion.

Miyu influence

Miyu mentioned the potential to use the feedback to create comedy meme images as shown below.



Jj

7th March 2016 at 5:35 pm (Edit)

very cool project you are working on, okay here goes,

Scene 1 – BOB HAS WOKEN UP : “why do they call me bob, my name isnt bob, wait what is a name, oh snap the car has gone, oh wait that means im home alone, yesss!!!”

Scene 2 – BOB GOES FOR BREAKFAST : “this is the life, free food, as much as i want whenever i want”

Scene 3 – BOB OUT FOR A WALK : “i’m bored, let me use my imagination, this bush is my sworn enemy and i will knock it out....wait who is that taking pictures of me..i thought i was alone??”

Scene 4 – BOB FETCHES THE MORNING MAIL: “something new through that thing again, hopefully it has some pictures of some pretty bitches...lol”

Scene 5 – BOB GREETES FAMILY : “How does this work again? oh yeah thats right i lay on my back and get a free massage, cmon human don’t just stand there PAT ME”

Scene 6 – BOB TREATS HERSELF: “Whats this, more stuff for me? Keep them coming!”

Reply



Miyu

10th March 2016 at 1:53 pm (Edit)

I think its almost the same what you said and what i was thinking but it could be totally different depends on people.

Maybe you can have Q&A(survey) or book without your voice and make people leave the comment what this or that dog trying to say. get data! ha

Anyway your dog is soooooo cute!

Reply

Collaborate meeting 5: Design discussion

A collaboration on applications of information

After discussing the potential applications of interaction design applied to animal behaviour theories with the zoologist and the proposal to apply them to addressing issues in canine behaviour and helping them when rehoused, he mentioned that it would be effective to apply theories of observing animal behaviour and to conduct it on household dogs.



CONCLUSION

The above interactions takes you through what I believe a dog will interact with and the mindset she has as she goes through her day. The goal is to use this information to find a interaction method for design that takes into account the dogs point of view to help dogs adjust and engage with new environments or better connect with their surroundings to avoid issues in their health and behaviour from developing.

FEEDBACK

Please if you are viewing this blog give your feedback to how you in the same situation would react and what you life as a dog would be like.

LEAVE A REPLY

Your email address will not be published. Required fields are marked *

Name*

Email *

Message*

go to blog to see:

<http://www.smidtvision.com/2016/02/24/what-are-dogs-thinking/>

What to do with the experience and information

Me - Though we had gains the information, I don't know what help this information could be

Zoologist - the information could be used to advise new pet owners, we could make a support pack that can be given to dog owners for guidance.

Me - yes that sounds great but what information that we have gathered would be useful for guidance to reform a dog

Zoologist - understanding how and what the dog does in a day and why can help owners to avoid issues in their behaviour from developing.

Influence on communication information



Discussion on potencial organisations

me - I agree, an interactive pack can be given for the purpose of educating and guiding both the pet and owners

Me - who could we distribute the pack to?

Zoologist - dogs trust has is funded and regularly provides information to the dogs they rehoming, the support pack could be distributed through them.

Dogs Trust Rehoming Centre in West London

Developed on the site of a disused farm Set in 16 acres of farmland includes two Grade II listed barns 75 kennels for stray and abandoned dogs

application of knowledge: 2 Interactive support package design concepts

Here are 2 concept ideas of how the information can be used to create entertaining experiences for humans or efficient training for rehoming dogs.

Interactive Pack For Human

The experience of connecting with what a dog feels, can be both instrumental in providing guidance for both the dog and owner in adjusting the dog into a new home, therefore both me and the zoologist have proposed a interactive support pack.

BOB HAS WOKEN UP



BOB GOES FOR BREAKFAST



Influence of interactive video

interactive videos provide feedback similar to my interactive dog lifestyle.

BOB GREET'S FAMILY

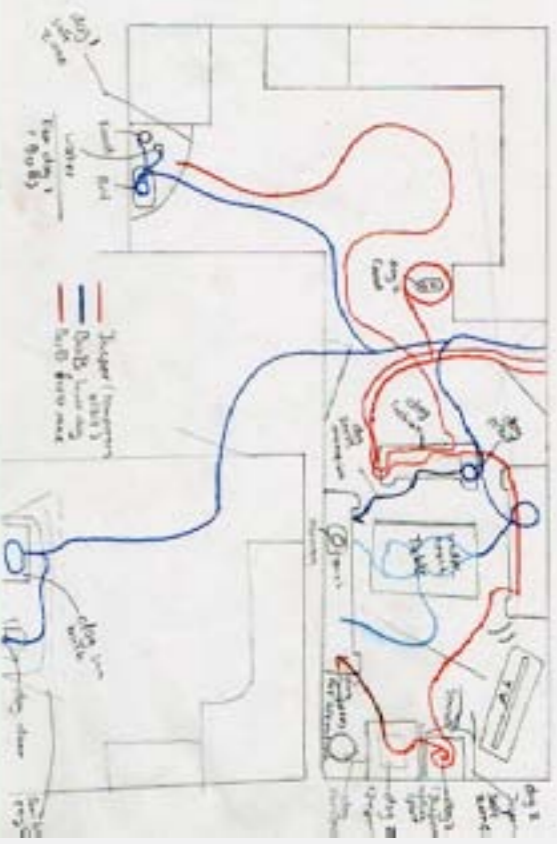
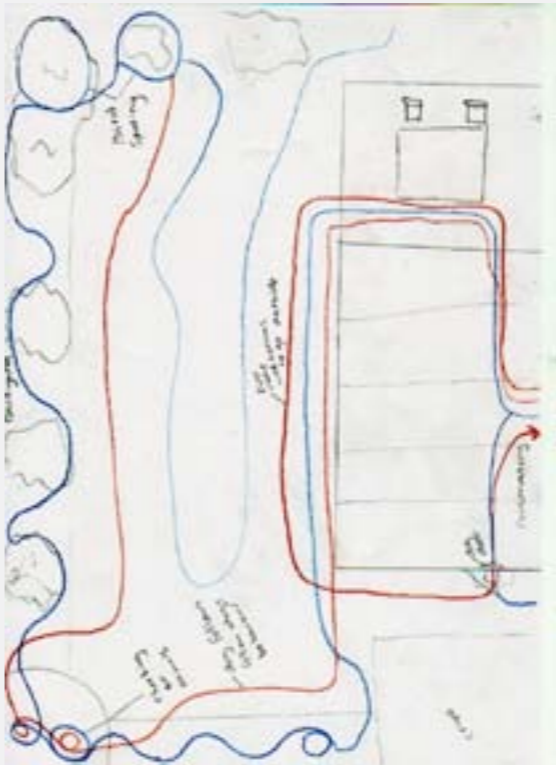


BOB GOES TO THE KITCHEN

This may be done visually through a a design that allows the owner to see a speculation of what their dog is thinking through various life style scenarios so

Interactive Pack for dog

The next is a potential device for the dogs use, an interactive set of object and labels placed and areas where the dog is likely to put into he/she routine, such as kitchen.



Reflection on dog related objects that interactive learning can be applied to

The pressure pads demonstrated in my research of UXPA, inspire me to consider as a trigger method for using sound based communication



Conclusive application of subject knowledge

Using the theories of dogs behaviour, routine and object, an interactive device placed in safe zones could be used as a method of helping dogs adjust



1) Bob has woken up



“why do they call me bob, my name isnt bob, wait what is a name, oh snap the car has gone, oh wait that means im home alone, yesss!!!”

it is good to see dogs in a human manner with human feelings, but it's important to see dogs as dogs.

Shane - I believe that a balance can then be found where humans can relate to how a dog feelings and routines but understand that their needs and wants are ultimately different and that they don't need a friend but a pack leader

- yes I agree

Shane - we can apply these theories to identify how a dog behaves in a way that we can relate to but also identify what needs they have that differ from ours.

2) Bob goes for Breakfast



“this is the life, free food, as much as i want whenever i want”

Animal behaviour survey

Help us to understand our dogs, by understanding what we as people believe dogs are thinking, so we may help our canine freinds.

Name

JJ

Email

j.maina1@arts.ac.uk

Please leave your comment of what you think the dog is thinking at each activity.

3) Bob after Breakfast



"i'm bored, let me use my imagination, this bush is my sworn enemy and i will knock it out....wait who is that taking pictures of me..i thought i was alone??"

5) Bob feches mail



"something new through that thing again, hopefully it has some pictures of some pretty bitches...lol"

4) Bob out for a walk



"How does this work again? oh yeah thats right i lay on my back and get a free massage, cmon human don't just stand there PAT ME"

6) Bob greets family



"Whats this, more stuff for me? Keep them coming!"

Collaborate meeting 6: Design dog device

Planning device interaction
Create a device method for helping dogs adjust and follow animal routines

Influences of Lost cat devices

These are some devices that Caroline and she and would help a cat explore

I believe that similar applications can be used for a dog to adjust to new environments through new environments by familiarising self with the unknown

Reflection of dog interaction device

Looking through how the survey shows that dogs are similar in behaviour and how humans prefer to humanise their dogs I believe that to help the dog are adjust to new environments a device of sorts can be made that helps a dog adjust and conduct their daily routines

Similar to how humans created a alarm clock to help them achieve tasks, just waking up at specific times

Zoologist meeting: response to dog device

This is a good idea, but should be a collaboration between humans and dogs. The 'alarm' or activity should actively involve both the human and the dog. Not the dog and then the human, but rather an unite. Dogs should always be put in a routine as this reduces unwanted behaviours. Dogs are very good at getting into routine, they tend to know exactly for example, when its feeding time and when there huan comes home.

They have acute hearing and smell receptors, which are used to gain clues to what time it is in their life. Such as if the heating comes on in the morning, this means that it is time to wake up and go for a walk, therefore letting the human know (by a series of barks and moans, or more invasive such as joining them on the bed).

The following are some examples of this being implemented by companies already:

- Doggie door bell, ring the bell when needs to go out to the toilet
- Automated feeding bowls, only opening at certain specifically programmed times
- Fly ball – dog inputs the ball into a hole and pushes on the board which 'throws' the ball for them
- Retrieving a toy, ball, and receiving a treat once e.g. ball is placed in the hole.
- Doggie treadmills. Taking the dog for longer walks

Conclusive design progression

The discussion of ideas and theories that apply to helping a dog adjust to new environments has lead me to design a device that can be placed in items familiar to dogs (see bullet point list above) that uses sound to help them follow a routine



Collaborate project: Day in the life of a dog

The Interactive Dog Cushion

Following the merging of interaction design and animal behaviour I have created a test model and application of theory that items familiar to dogs (cushion) can be used with sound training to help them adjust to new environments

Colaborative meeting: Interactive experiment advice

What do you think about applying sound commands or an alarm system to where the dogs cushion helps the dog follow a routine?

I believe that a voice command for a dog would be best used as sound training, allowing the dog to respond to tones of sound and phrases from the owner to help the dog adjust

Reflection and Application of sound training

I am planing to create a device that uses objects familiar to dogs, that will contain sound based communication that will be triggered either by planned events via a calander or trigered by the dogs actions.

Interactive Cushion placed in Dogs identified safe zone

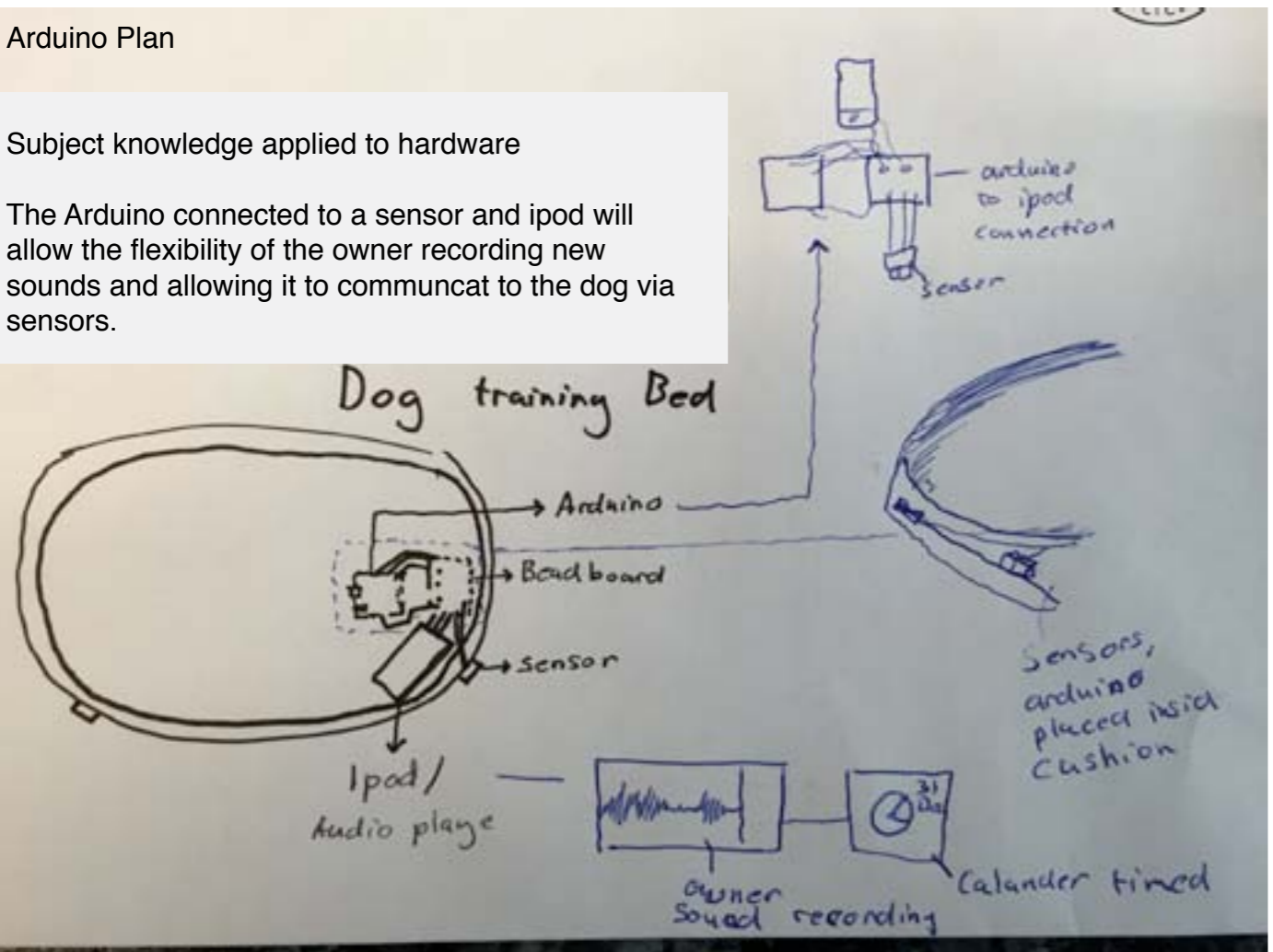
(see dogs movement Survey)



Arduino Plan

Subject knowledge applied to hardware

The Arduino connected to a sensor and ipod will allow the flexibility of the owner recording new sounds and allowing it to communcat to the dog via sensors.



Audio Device

Sensor S=Device

