

Task for Interaction Design - Fields of View
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Interpreting the Text/ Insights

In Mani Ratnam's film *Bombay*, a city is portrayed as a refuge and a new home for people outcasted by their families, for rebellion against archaic institutions and practices. A place where one can find freedom and a living with peace and love. But, as the film progresses, the city shows its dark/other side as the same institutions that the protagonists were running away from are practising the same archaic ideas with greater strength and violence. This time, not in the shadows but in the lime light of the world. In many films, an innocent young person from a village arrives at the city in search of a brighter life to find it filled with mafias, prostitutes and rats in the sewage lines.

In Alé Abreu's film - *Boy and the World*, the city is portrayed as a place with crowded slums and busses, traffic filled roads, a place where capitalists don't even blink before replacing human labours with machines at the first chance, where loneliness reigns and food is gooey and canned, where nature is bent to human will. Where everyone pauses their everyday living to make way for military strength and parades. With a few hints of people trying their best to find some joy, music, dance and art on holidays.



On reading the text (transcripts and field notes), the accounts of the individuals, I could only relate to these portrayals of the city. Where the world is at odds with the individuals. This perspective (my understanding of it) is presented in an interactive visualisation. Taking huge inspiration from *Boy and the World*.

Crafting a narrative from the qualitative research:

A subjective/user group perspective is to be presented.

The setting: Bengaluru, an urban environment. The roads are crammed with traffic and construction work.

Social Group - Textile workers.

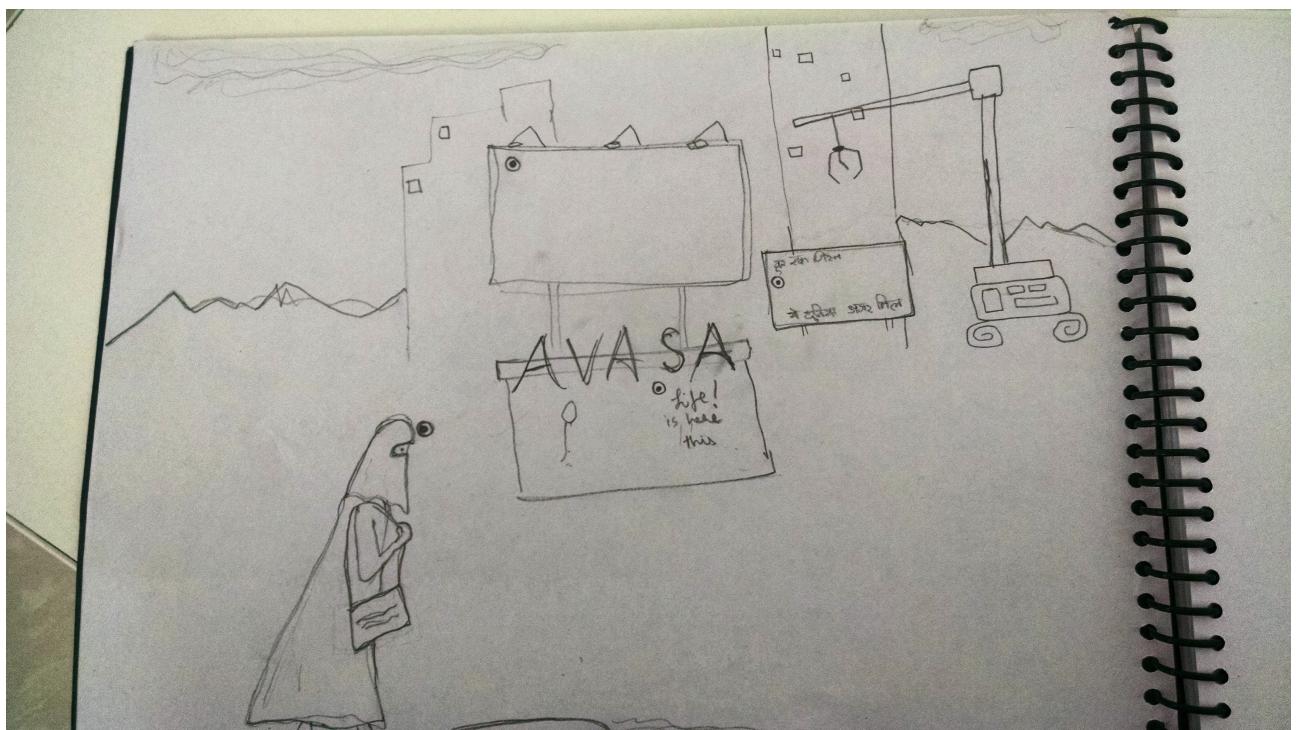
The plight of an individual textile worker in their commute to work can be presented.

Social group and their setting

Public transport is expensive. Though light on the wallet, alternate modes of transport are unsafe, crammed and penalised by regulations. But, they compromise on them to save money. And, a last resort is to walk.

Institutions like the GMM and BBPV help them be aware of their rights.

While presenting this picture, the text - excerpts from the interview can be presented. Also, images of actual setting can be revealed from the picture that is presented.



Initial rough sketch for the setting.

Building the Narrative.

[The focus is brought from the city on the person.]

Walking... I work in a textile factory 3 kms away. Yes, I know walking's good for one. But, in this pollution? Why do you think I am?

[The focus is brought on the BMTC bus passing...]

BMTC... In this traffic and congestion, it takes 30 minutes for even this 3 km journey. Also, the public busses are expensive for us. Some of my colleagues who travel from 10km far spend __% of their income if they travel in public busses.

Weaving around..

Autos.. They are convenient on the wallet but are crammed. But, that's alright, I guess.

Vans and Tempos.. also help us sometimes.. but because of the fear of being caught by traffic police, they sometimes don't stop for us..

[Focus is brought to traffic police.]

See.. Traffic police regulate private vehicles for carrying more people than allowed. There is sometimes an understanding between the

~~Public busses~~.. They are also light on the wallet but, They son't stop at our destinations.

[Focus is brought back on the person]

I'm a member of the GMM and BBPV. I spread awareness among other garment workers on their rights.

I need to walk faster, I'll have to face penalty if I'm late. We hope for better transport services. Thanks for listening to our story.

[She walks faster]

Interactions

The interaction of scroll, doesn't hold any significant meaning in this scenario, but is only to move the narrative forward.

Hotspots to click?

Show, don't tell. To present the picture, visually. With more detail in visuals, like crammed busses, crammed autos, pollution and smoke. The person's plight of walking in that setting can be seen.

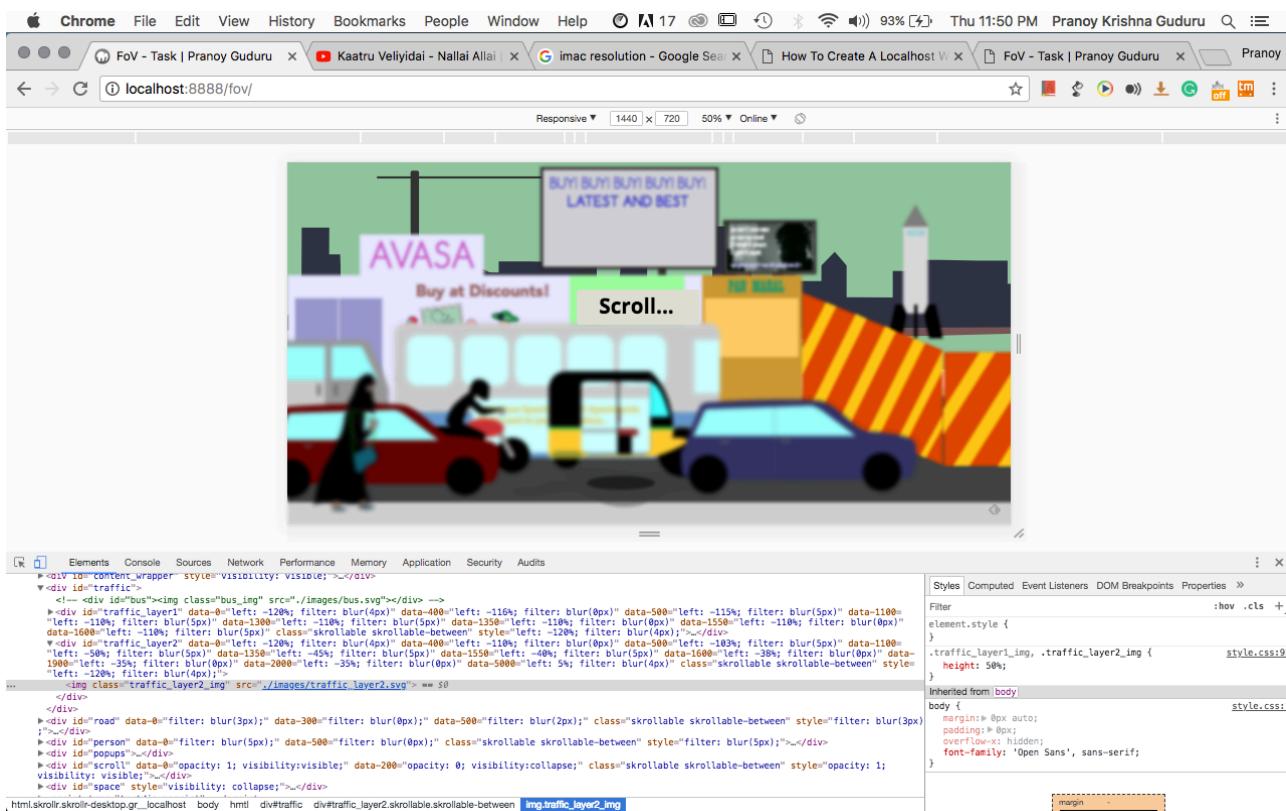
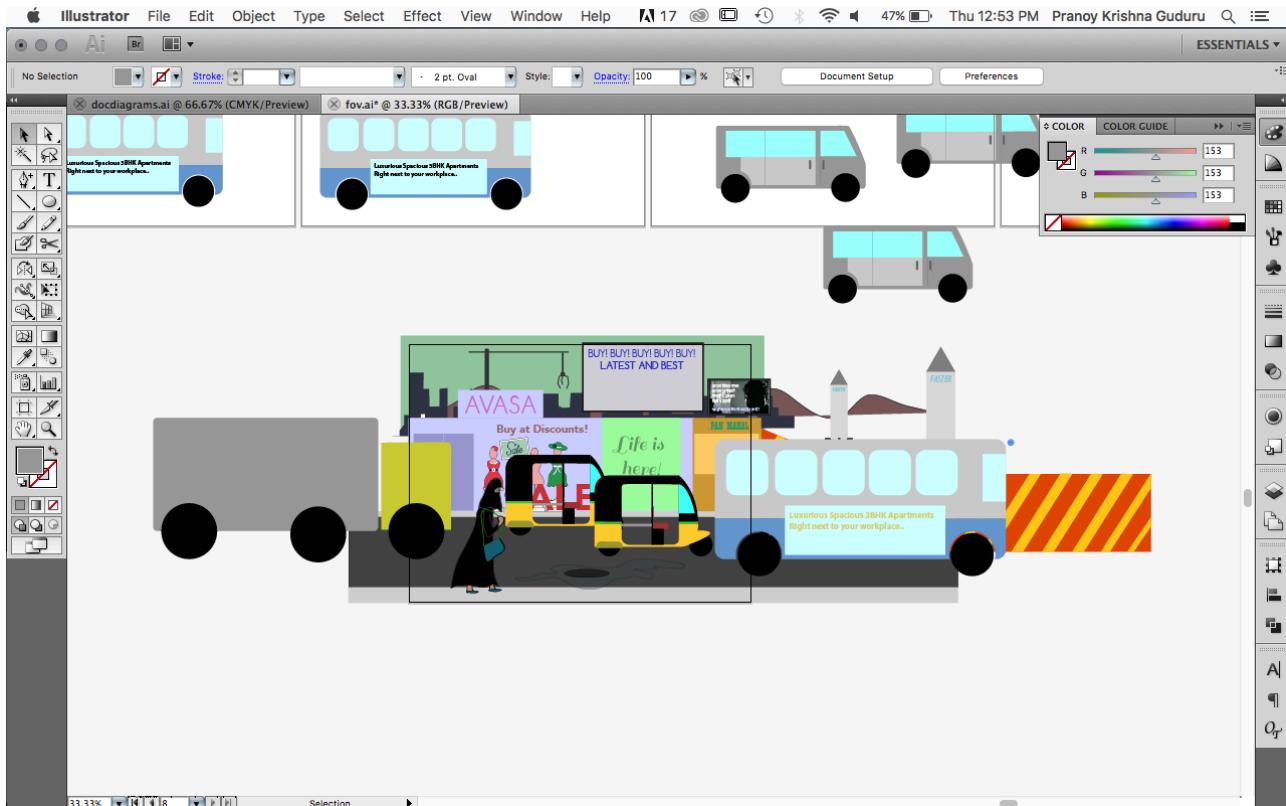
Later with the hotspots, we can tell the exact narrative, we want to present.

Best View in 1140*720 resolution.

The experience can be optimised for mobile screens in landscape & fullscreen mode.
(have not implemented)

Credits for mannequin illustrations[used as a standin] : <https://www.vecteezy.com/vector-art/122320-free-mannequin-vector>

Making the visuals (rough).



Making it for the web

Code Documentation

File Structure :

```
fov
|-index.html
|-images
  |-space.svg
  |-shops.svg
  |-traffic_layer1.svg
  |-traffic_layer2.svg
  |-scroll.svg
  |-bg.svg
  |-road.svg
  |-indicator.svg
  |-auto.svg
  |-blockade.svg
  |-bus.svg
  |-rocket.svg
  |-woman.svg
|-scriptsv
  |-skrollr.js
|-styles
  |-style.css
```

Animating with scroll position with Skrollr.js

website : [http://prinzhorn.github.com/skrollr/]

github : https://github.com/Prinzhorn/skrollr

Include the skrollr.min.js file at the bottom of the document (right before the closing </body>) and then call skrollr.init().

```
.
.
<script type="text/javascript" src="skrollr.min.js"></script>
<script type="text/javascript">
var s = skrollr.init();
</script>
</body>
```

Animating

The following code snippet changes the background colour of the text WOOT from rgb(0,0,255) to rgb(255,0,0) from scroll position 0 to scroll position 500 in height.

```
<div data-0="background-color:rgb(0,0,255);"
     data-500="background-color:rgb(255,0,0);>WOOT</div>
```

These animation attributes are set to elements with javascript.

For eg.

```
<div id="person"></div>
```

To animate this div.

Writing script.

```
var person = document.getElementById("person");
person.setAttribute("data-0","filter: blur(5px);");
```

```
person.setAttribute("data-500","filter: blur(0px);");
```

Hotspot for interactivity / Pop up modals

```
<div id="popups">
  <div id="text1" class="popup" onclick="popup(this);">
    <a class="popup1"></a>
    <span class="popuptext" id="popupWindow1">
      <h1>walking..</h1>
      <p> I work in a textile factory 3 kms away.<br/>
        Yes, I know walking's good for one. But, in this pollution? Why do you think I am? </p>
    </span>
  </div>
```

for each new hotspot/modal

1. div with id, "text1" is can be cloned in the div with id "popups".
2. give unique id to new clone, in place of text1. This is used in CSS to point it's location.
3. Also, give unique id to span element in div. This is used to hide modal on scroll.
4. In window.onscroll function in the header, add \$ ("#popupWindow1").css('visibility','hidden'); with the unique div id.

Checking window size

Works in landscape mode. To capture the entire scene, check for height of the window to be greater than 680.

The on window resize event takes care of this.

```
$(window).resize(function(){
  var w = window.innerWidth;
  var h = window.innerHeight;
  console.log(w,h);
  if(w<1000 || h<680) {
    $("#content_wrapper").css("visibility","hidden");
    $("#space").css("visibility", "visible");
  }
  else{
    $("#space").css("visibility", "collapse");
    $("#content_wrapper").css("visibility","visible");
  }
});
```