

# 数字自我 日常生活 城市空间

*Digital Self, Daily Life  
and City Space*

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清华大学建筑学院



Photo by Zhang Kaiyv

*Digital Self, Daily Life and City Space*  
**Background 背景**

Camera and diary are the traditional ways of self-recording.

我们记录生活的方式通常为相机和日记。



## Digital Self, Daily Life and City Space Background 背景

With the advancement of science and technology, the potential of new technologies in recording personal life and studying individual behavior has constantly been explored.

Wearable camera offers data-driven insights into the patterns and characteristics of our lives.

随着科学技术的进步，人们不断探索着新技术在记录个人生活和研究个人行为方面的潜力。可穿戴式相机具有数据驱动的观察力，可以帮助我们了解自身的生活模式和行为特征。



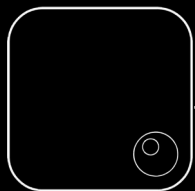
*Digital Self, Daily Life and City Space*  
**Research Purpose 研究目的**

In this project, wearable cameras have become 24/7 eyes which digitalized our real life into images, recording how we spend a day.

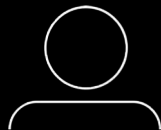
在这个项目中，可穿戴式相机成为了全天候的眼睛，将我们的现实生活数字化为图像，记录了我们如何度过一天的生活。



Digital Self, Daily Life and City Space  
**Research Methodology 研究方法**

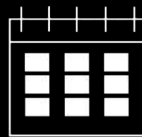


可穿戴式相机  
所用设备



5位志愿者  
参与人数

x5



7天 (包括工作日和周末)  
项目周期

07  
DAYS



每30秒自动拍照  
拍照频率

30  
SEC

The wearable camera can clip onto a user's clothing and automatically taking a photo every 30 seconds. We invited 5 volunteers of different ages and varying occupations to wear a camera for an entire week.

可穿戴式相机可以夹在用户的衣服上，每隔30秒自动拍照。我们邀请了5名不同年龄和不同职业的志愿者在一整周内佩戴相机，总共收集了35000张照片。



总共收集到  
35000 余张照片

# Profile of 5 Participants 5位志愿者的个性标签

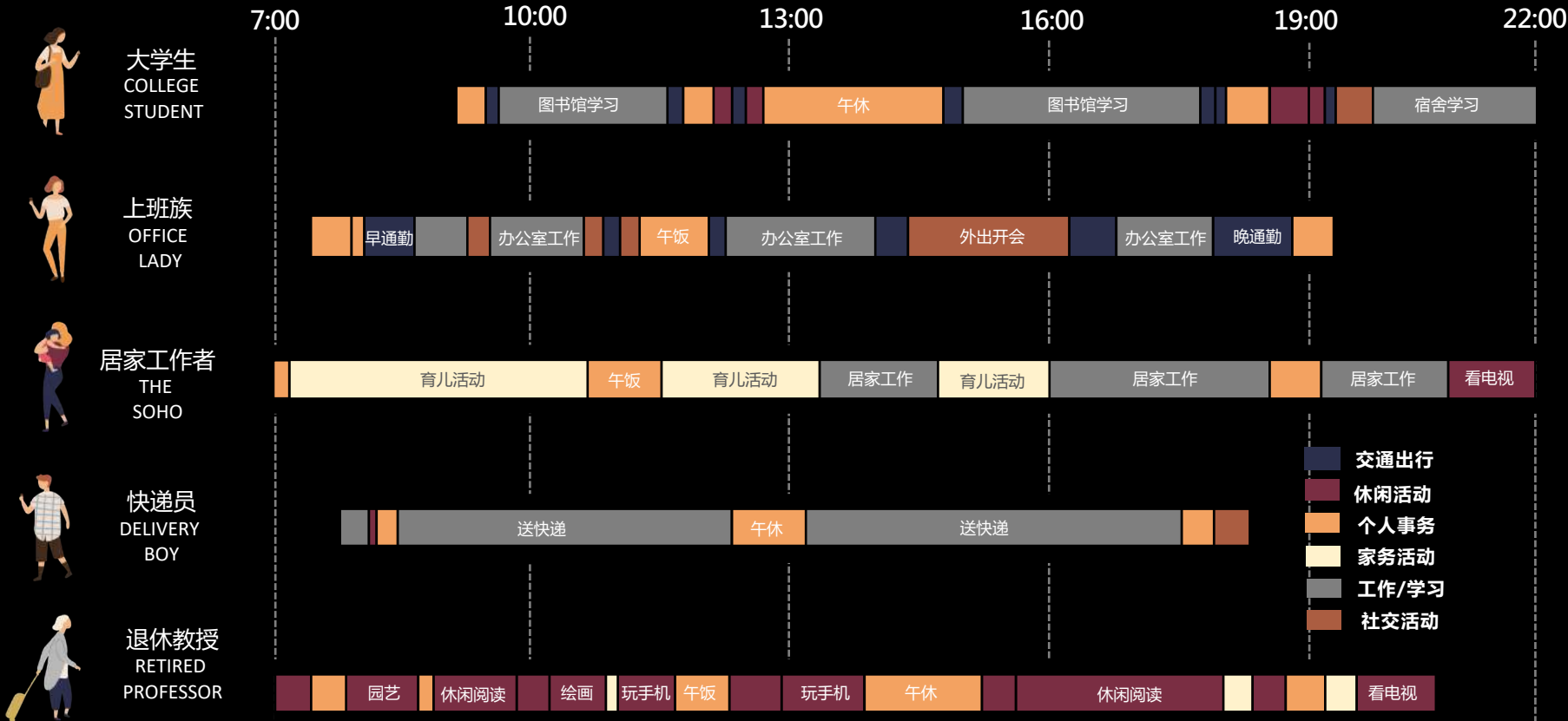


# HOW DID THEY SPEND A TYPICAL DAY?

One typical day of 5 participants

用科技叙述过去——  
5位志愿者具有代表性的一天

# Timeline of A Typical Day 代表性一天的时间轴





# A Typical Day of the College Student 大学生的一天

吃早饭  
having  
breakfast

09:00

前往图书馆  
on the way to  
the library

09:20

图书馆学习  
study in the  
library

10:00

吃午饭  
having lunch

12:00

在水塘旁休息  
rest beside the  
pool

12:40

图书馆学习  
study in the  
library

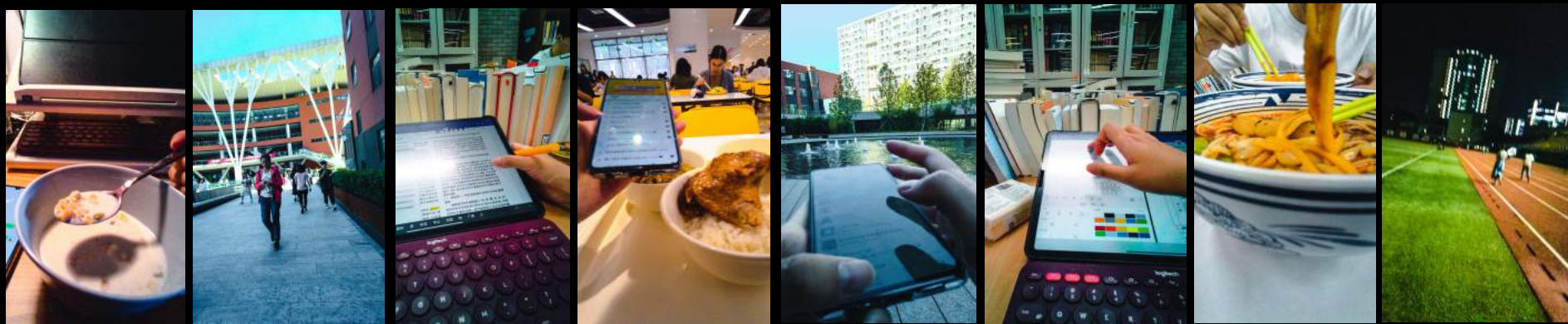
16:00

吃晚饭  
having dinner

18:00

在操场散步  
walk in the  
playground

19:00



特点：长时间的图书馆学习，独处的一天

# A Typical Day of the Office Lady 上班族的一天

起床  
wake up

07:20

上班通勤  
on the way to  
the office

08:10



与老板开会  
meeting with  
boss

09:20

吃午饭  
having lunch

12:00

打车外出  
on the way to  
the meeting

14:40

与合作单位  
开会  
meeting with  
partners

16:00

乘坐地铁  
on the  
subway

18:20

骑行回家  
going back  
home

18:40



特点：多种通勤工具，多次社交活动

# A Typical Day of the SOHO 居家工作者的一天

吃早饭  
having  
breakfast

07:00

育儿活动  
looking after  
baby

09:30

外出遛娃  
go out for a  
walk

10:00

吃午饭  
having lunch

11:00

居家工作  
working at  
home

14:00

准备辅食  
cooking

15:30

吃晚饭  
having dinner

19:00

居家工作  
working at  
home

20:00



特点：家务活动穿插着居家工作，工作时间集中在下午和晚上

# A Typical Day of the Delivery Boy 快递员的一天

吃早饭  
having  
breakfast

08:10

送快递  
working

09:30

送快递  
working

11:00

吃午饭  
having lunch

12:30

在宿舍午休  
resting in the  
dorm

12:50

送快递  
working

14:00

送快递  
working

16:00

吃晚饭  
having dinner

17:30



特点：被工作填满的一天，几乎没有休闲时间

# A Typical Day of the Retired Professor 退休教授的一天

吃早饭  
having  
breakfast

07:30

园艺  
gardening

08:00

练习书法  
handwriting

10:40

吃午饭  
having lunch

12:00

外出散步  
going for a  
walk

12:40

手机阅读  
reading

16:00

做饭  
cooking

18:00

看电视  
watching TV

20:00



特点：琴棋书画，惬意的独居生活

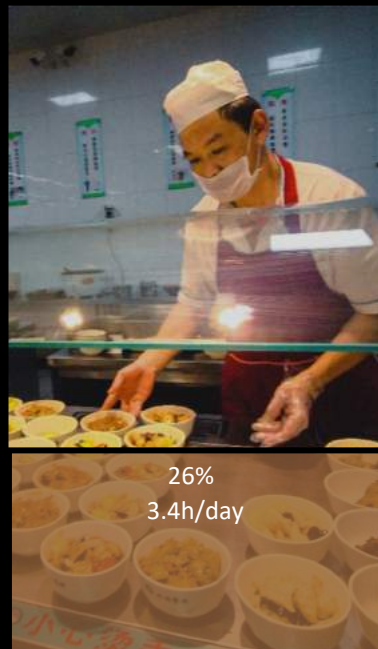
# HOW DID THEY USE THEIR TIME?

The time allocation of six types of daily activities  
(personal affair/work/housework/travel/social/leisure)

用数据注解生命——  
一周各类日常活动的时间占比

# Who Spent more Time on Personal Affair 个人事务的时间占比 (吃饭/睡觉)

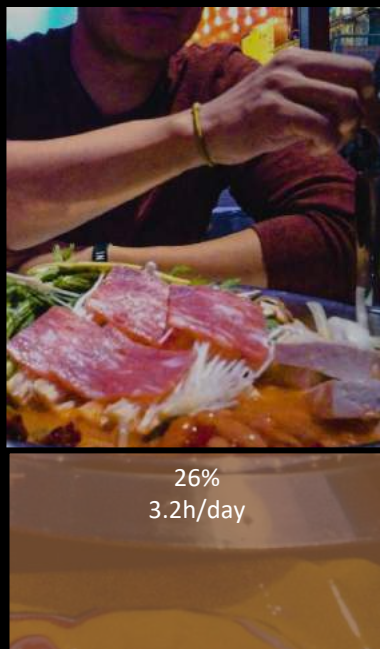
time ratio=pictures captured the activity/ total pictures



大学生  
COLLEGE STUDENT



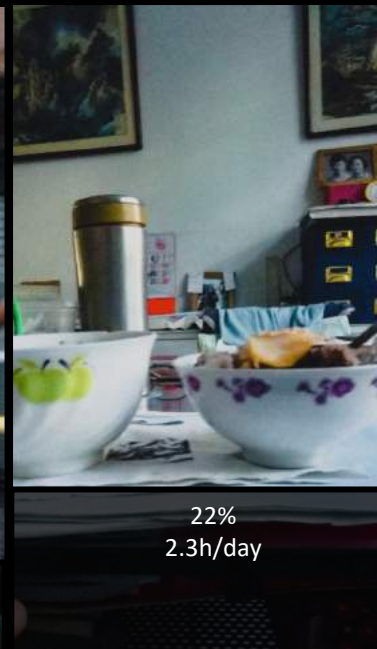
上班族  
OFFICE LADY



居家工作者  
THE SOHO



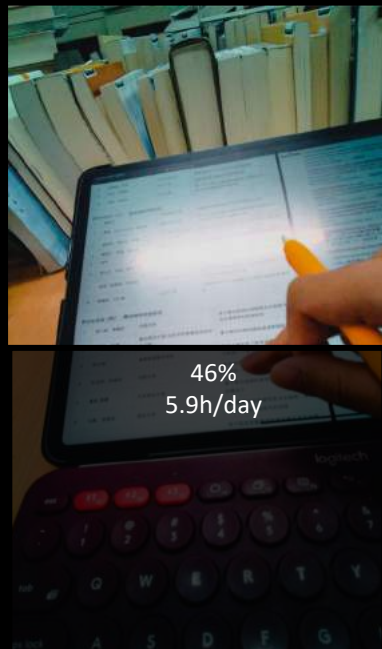
快递员  
DELIVERY BOY



退休教授  
RETIRED PROFESSOR

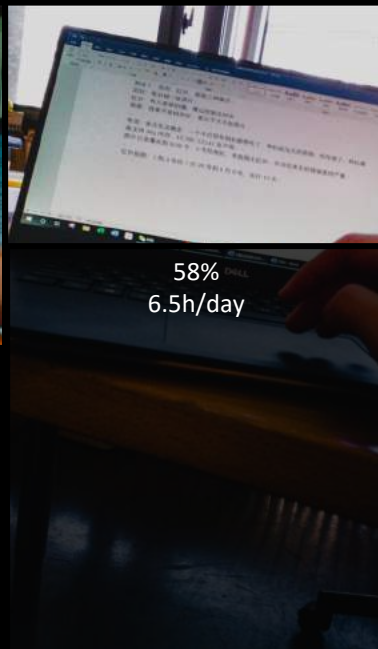
# Who Spent more Time on Work/Study 工作/学习的时间占比 (工作/学习)

time ratio=pictures captured the activity/ total pictures



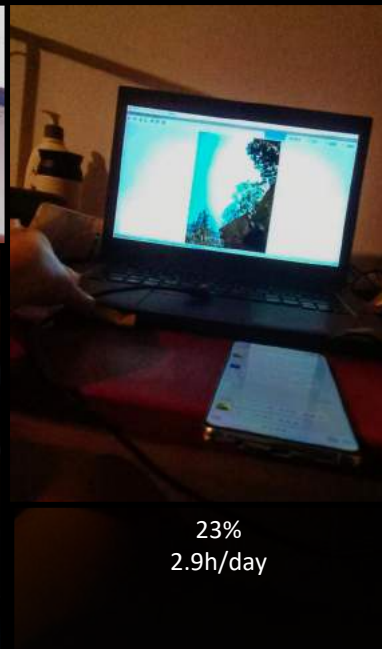
46%  
5.9h/day

**大学生**  
COLLEGE STUDENT



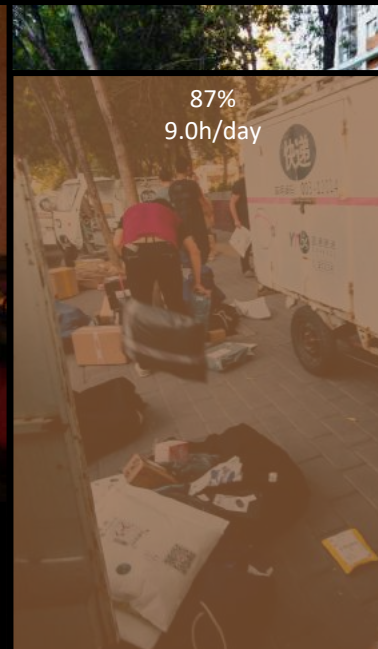
58%  
6.5h/day

**上班族**  
OFFICE LADY



23%  
2.9h/day

**居家工作者**  
THE SOHO



87%  
9.0h/day

**快递员**  
DELIVERY BOY



0%  
0h/day

**退休教授**  
RETIRED PROFESSOR



# Who Spent more Time on Housework 家务活动的时间占比 (做饭/洗碗/育儿活动)

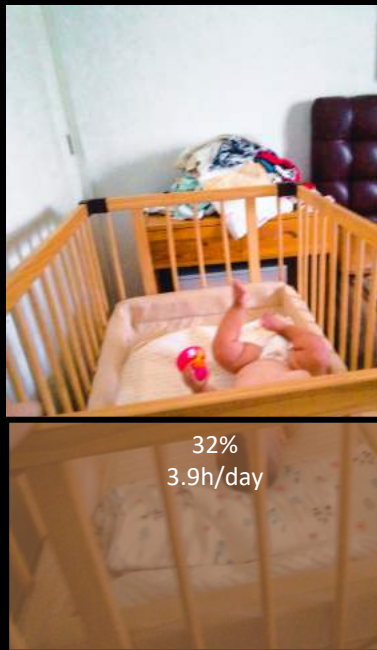
time ratio=pictures captured the activity/ total pictures



大学生  
COLLEGE STUDENT



上班族  
OFFICE LADY



居家工作者  
THE SOHO



快递员  
DELIVERY BOY



退休教授  
RETIRED PROFESSOR

# Who Spent more Time on Travel 交通出行的时间占比 (走路/骑行/公交/私家车)

time ratio=pictures captured the activity/ total pictures



13%  
1.6h/day

**大学生**  
COLLEGE STUDENT



14%  
1.5h/day

**上班族**  
OFFICE LADY



8%  
1.0h/day

**居家工作者**  
THE SOHO



1%  
0.1h/day

**快递员**  
DELIVERY BOY



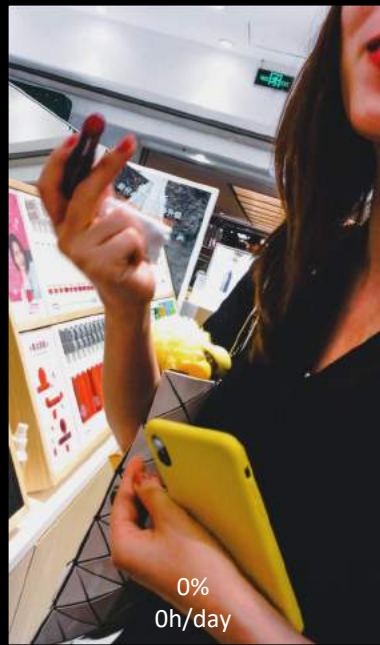
2%  
0.3h/day

**退休教授**  
RETIRED PROFESSOR

Digital Self, Daily Life and City Space

# Who Spent more Time on Social 社交活动的时间占比 (面对面交流)

time ratio=pictures captured the activity/ total pictures



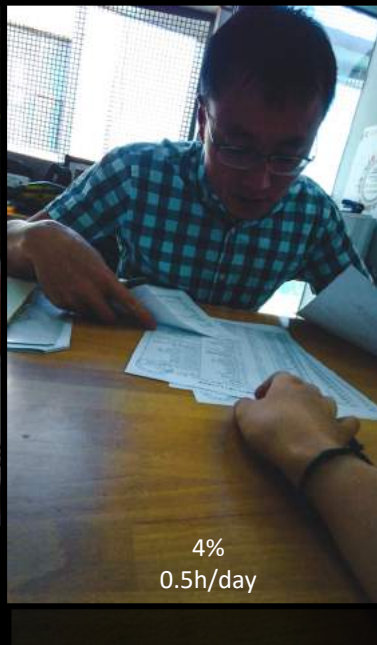
0%  
0h/day

大学生  
COLLEGE STUDENT



18%  
2.0h/day

上班族  
OFFICE LADY



4%  
0.5h/day

居家工作者  
THE SOHO



0%  
0h/day

快递员  
DELIVERY BOY



2%  
0.3h/day

退休教授  
RETIRED PROFESSOR

# Who Spent more Time on Leisure 休闲活动的时间占比 (看电视/运动/逛街等)

time ratio=pictures captured the activity/ total pictures



15%  
1.8h/day

大学生  
COLLEGE STUDENT



0%  
0h/day

上班族  
OFFICE LADY



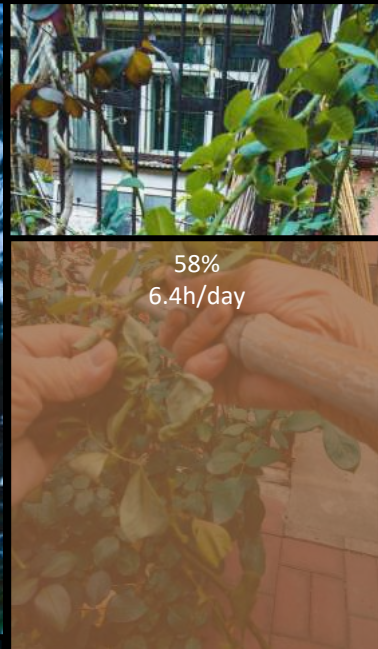
7%  
0.8h/day

居家工作者  
THE SOHO



0%  
0h/day

快递员  
DELIVERY BOY



58%  
6.4h/day

退休教授  
RETIRED PROFESSOR

# HOW WERE THEY USING DIGITAL SCREENS?


用图像量化自我——  
一周电子屏幕暴露情况

We use social media like Twitter and WeChat to connect with others, use Mobike for short-distance commute, use Dianping for navigating us to a good lunch and then pay the bill via Alipay. At the end of a long day, we usually spend the rest of time on watching TV or playing online game for relaxing ourselves.

These electric products bring convenience to our life, while at the same time, they are kidnapping our life.

*“早上醒来还躺在被窝里，先用手机上网，看看有什么新闻，谁在微博上@了我；开车出门，先用手机查实时路况；等人时，用手机看看视频，玩玩游戏；晚上请朋友吃饭，用手机查一下饭店招牌菜；夜深人静，如果不用手机微信一阵，就没法安然入眠...”*

**——手机正在成为人的第六器官**



Screen time= **3.1** hours per day

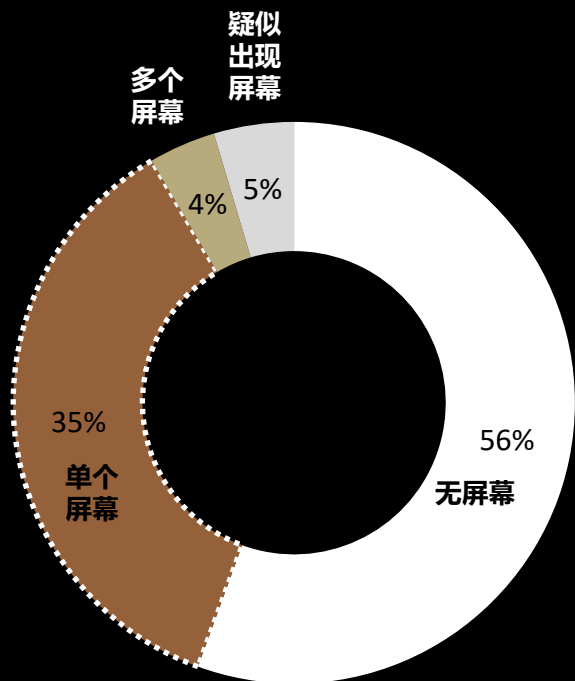
— according to the data analysis of our volunteers

通过对收集到的志愿者们的照片进行统计，我们发现

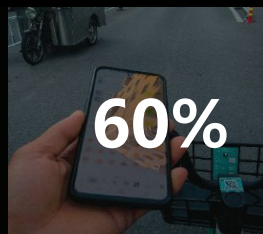
人们平均每天的屏幕使用时间为3.1个小时。

# Digital Self, Daily Life and City Space

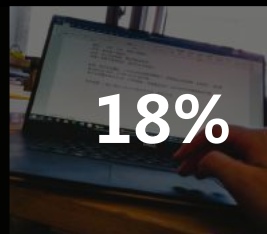
## Screen Types 屏幕类型统计



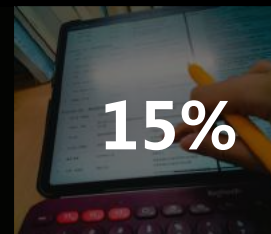
### 单个屏幕使用场景



手机  
Phone



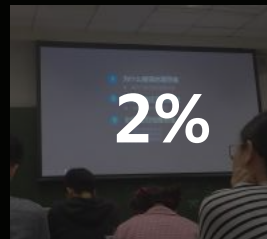
电脑  
Computer



平板  
Tablet



电视  
TV



投影仪  
Projection  
Screen

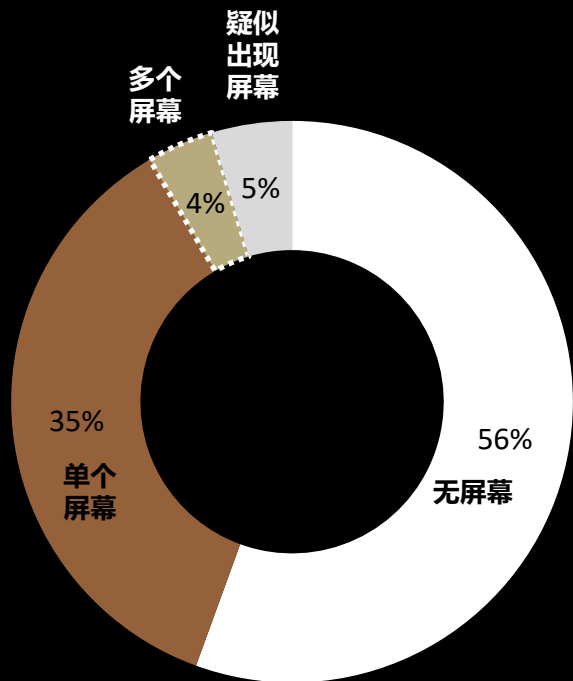


其他  
Others

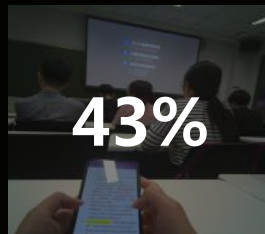


# Digital Self, Daily Life and City Space

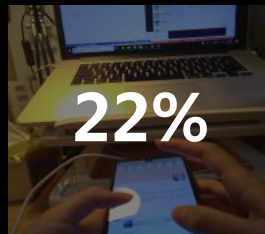
## Screen Types 屏幕类型统计



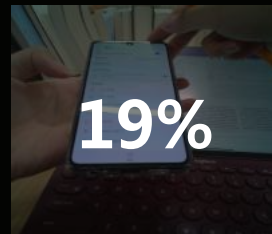
### 多个屏幕使用场景



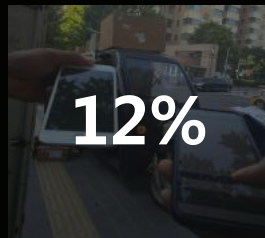
手机+投影仪  
Phone+Projector  
Screen



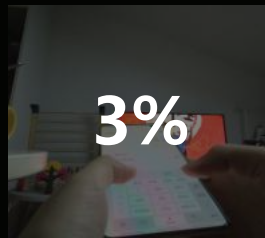
手机+电脑  
Phone+Computer



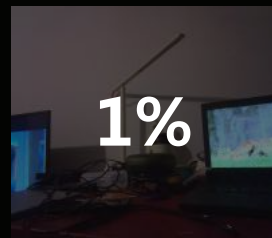
手机+平板  
Phone+Tablet



手机+手机  
Phone+Phone



手机+电视  
Phone+TV



电脑+电视  
Computer+TV

Unlock screen **100+** times per day

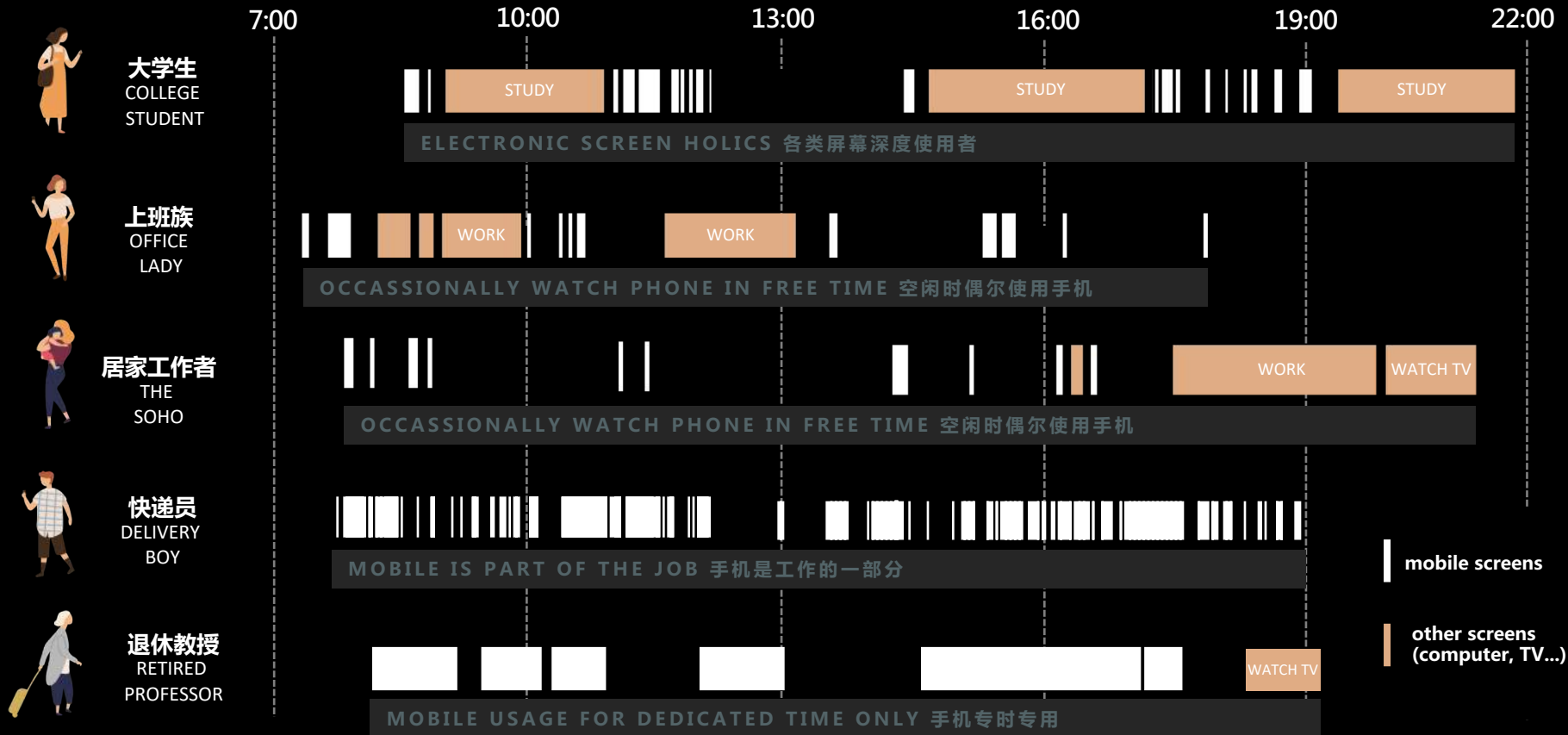
— according to the monitoring apps of our volunteers

平均每天解锁手机屏幕100余次。

Our dependency on electric products is altering and fragmenting the time we spend on daily activities.

我们对电子产品的依赖性让我们的时间越来越碎片化。

# Fragmentation of Screen Use 屏幕使用时间碎片化情况



# Screen Use during Personal Affair 个人事务的屏幕使用比例 (吃饭/睡觉)

screen ratio = pictures captured screens / total pictures



24%

大学生  
COLLEGE STUDENT



24%

上班族  
OFFICE LADY



26%

居家工作者  
THE SOHO



25%

快递员  
DELIVERY BOY

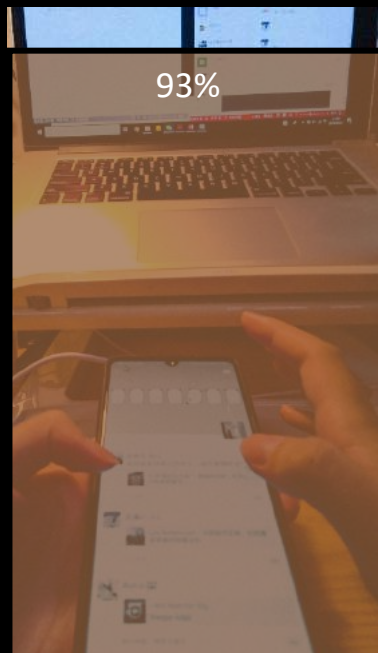


6%

退休教授  
RETIRED PROFESSOR

# Screen Use during Work/Study 工作学习的屏幕使用比例 (工作/学习)

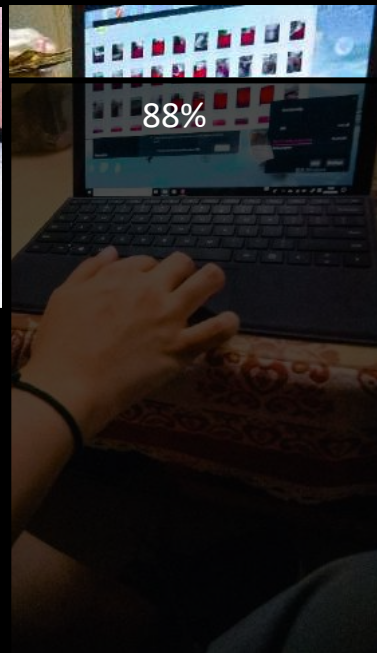
screen ratio = pictures captured screens / total pictures



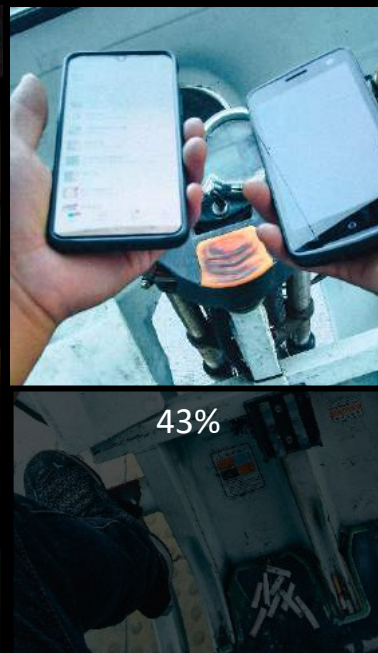
大学生  
COLLEGE STUDENT



上班族  
OFFICE LADY



居家工作者  
THE SOHO



快递员  
DELIVERY BOY



退休教授  
RETIRED PROFESSOR

Digital Self, Daily Life and City Space

# Screen Use during Housework 家务活动的屏幕使用比例 (做饭/洗碗/育儿活动)

screen ratio = pictures captured screens / total pictures



0%

大学生  
COLLEGE STUDENT



0%

上班族  
OFFICE LADY



13%

居家工作者  
THE SOHO



0%

快递员  
DELIVERY BOY



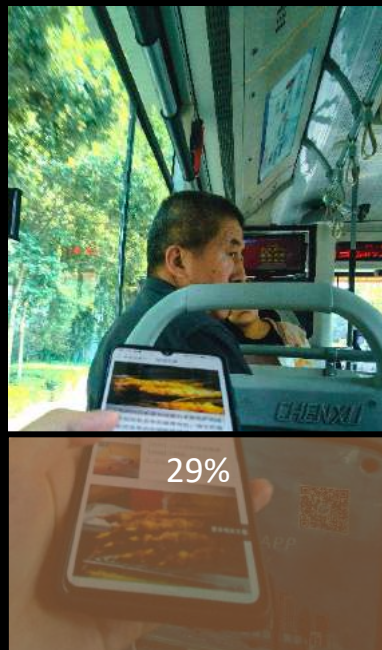
0%

退休教授  
RETIRED PROFESSOR

Digital Self, Daily Life and City Space

# Screen Use during Travel 交通出行的屏幕使用比例 (走路/骑行/公交/私家车)

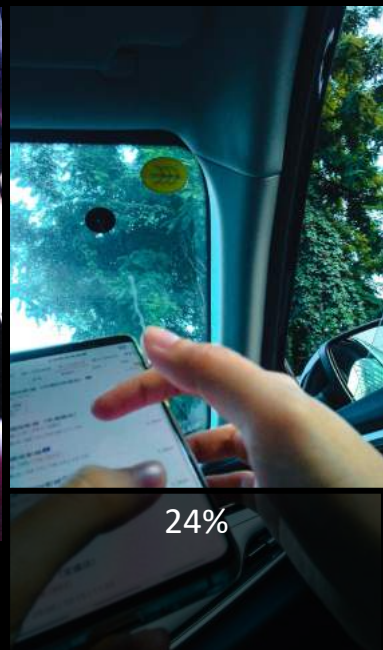
screen ratio = pictures captured screens / total pictures



大学生  
COLLEGE STUDENT



上班族  
OFFICE LADY



居家工作者  
THE SOHO



快递员  
DELIVERY BOY



退休教授  
RETIRED PROFESSOR

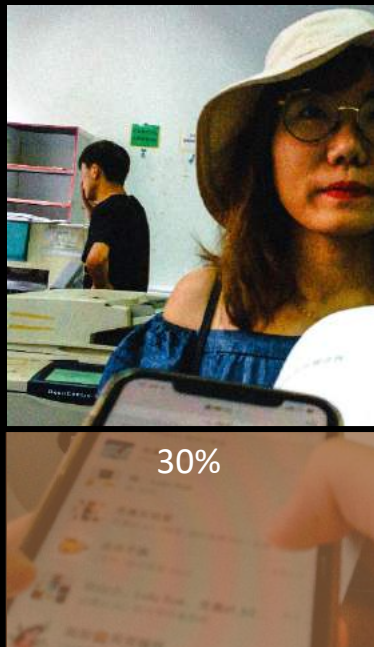
Digital Self, Daily Life and City Space

# Screen Use during Social 社交活动的屏幕使用比例 (面对面交流)

screen ratio = pictures captured screens / total pictures



大学生  
COLLEGE STUDENT



上班族  
OFFICE LADY



居家工作者  
THE SOHO



快递员  
DELIVERY BOY



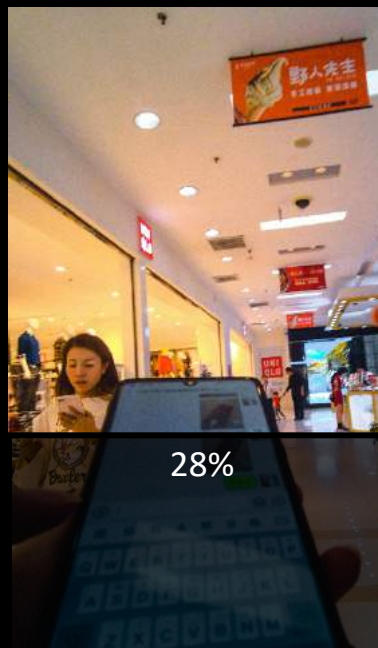
退休教授  
RETIRED PROFESSOR



Digital Self, Daily Life and City Space

# Screen Use during Leisure 休闲活动的屏幕使用比例 (看电视/运动/逛街等)

screen ratio = pictures captured screens / total pictures



大学生  
COLLEGE STUDENT



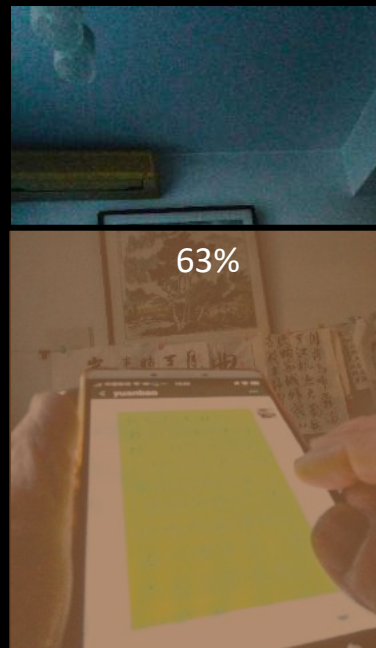
上班族  
OFFICE LADY



居家工作者  
THE SOHO



快递员  
DELIVERY BOY




退休教授  
RETIRED PROFESSOR

## Key Findings 主要发现：数字化地记录自我 + 记录被数字化的自我

- 日新月异的科技，让我们可以以秒为单位进行生命日志（未来的考古学？）
- 新生活、新工作、新休闲、新交通模式的涌现（新新新人类的出现）
- 各种屏幕的使用，加速了时间的过度碎片化（人类注意力有史以来的最大幅度下降？）
- 社交活动中的高频率和高比例的屏幕使用（我们的社交质量到底如何？）
- 屏幕时间，how much is too much?（拥抱还是逃离？）





**BCL (Beijing City Lab)**  
**School of Architecture, Tsinghua University**

**Project Team Members:**

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