

AM I NORMAL? (OR WHY QS IS FOR EVERYONE)

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The Open
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A BIT ABOUT MYSELF...

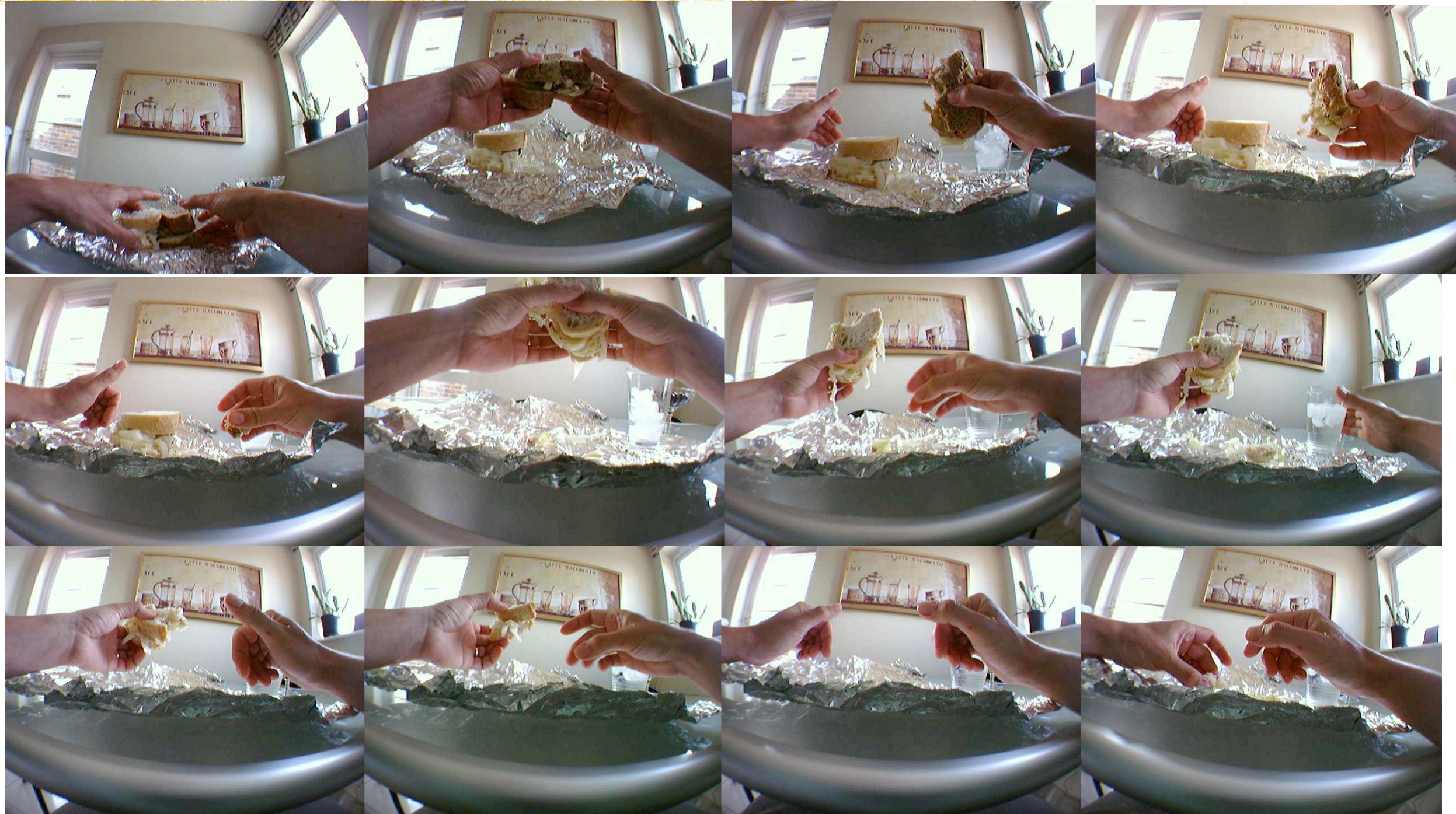
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- My name is Blaine (yes, that's my first name) and I've been self-tracking since the late 1980s
 - It started out with simple things, like tracking weight change
 - Then I started tracking my running time, just to see if I was improving
 - I used pen and paper or 80s/90s smartphone predecessors (Psion Series 3)

THEN I MOVED ON TO TRACK OTHER THINGS



- Mid-2000s: GPS let me do constant location tracking
- 2010s: explosion of automatic tracking:
 - visual lifelog camera (sensecam), activity (fitbit, Moves), heart rate, blood pressure, O₂ sats, sleep start/end/depth/brain activity (smartphone, Zeo, now Beddit), energy generation/consumption, miles cycled, car miles, productivity level on computer (RescueTime)

DIMINISHING FOOD



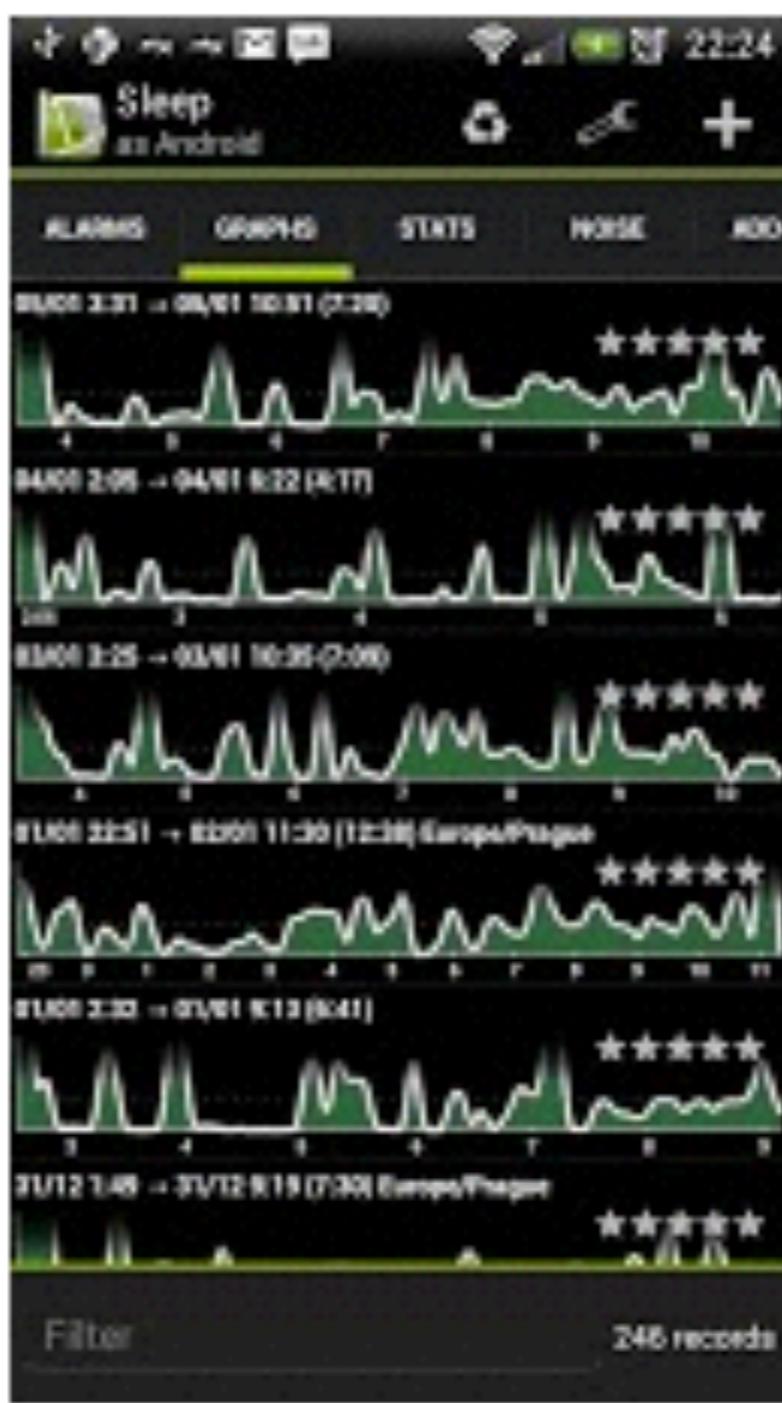
BUT I HAD TO FIND WAYS TO FUND MY HABIT...



- So I had to get grants to study so-called normal people
- mid-2000s began to study privacy, so did studies of automatic location tracking and lying about location
- 2010 grant to study location tracking in groups
- 2012 study of ordinary people tracking activity and sleep with smartphone
- but people were fascinated by sleep so tried Zeo to track brain activity (but invasive and non-automatic)



SLEEP AS ANDROID



ACTIVITY/SLEEP RESULTS

- FitBit is easy to lose, easy to forget to charge, easy to mess up sleep tracking, a bit invasive on sleep tracking
- FitBit sleep data not very accurate for lots of people
- lots of 'ordinary' people are interested in sleep data
- insights were few and highly individual but most people wanted to compare with norms for reassurance
- Find out if they were normal

HORIZON STUDY & FINDINGS



- People need more automatic collection of data
 - Charge/Sync, Invasiveness, Accuracy, Data Openness
- People need more automatic analysis of data
- People want to calibrate themselves against themselves
- People need to calibrate themselves against others (what is normal?)

THEN I HAD TO GET MORE GRANTS TO KEEP FUNDING MY HABIT



- Privacy Dynamics:
 - Teams of junior doctors in a hospital tracking and sharing HRV (stress levels), activity, sleep, location and co-location data
 - Patients recovering from knee surgery tracking and sharing activity levels, part blinded to find sweet spot of activity level to maximise recovery
 - Young survivors of breast cancer tracking activity levels
- What is Normal?

AND ANOTHER GRANT: MONETIZE ME

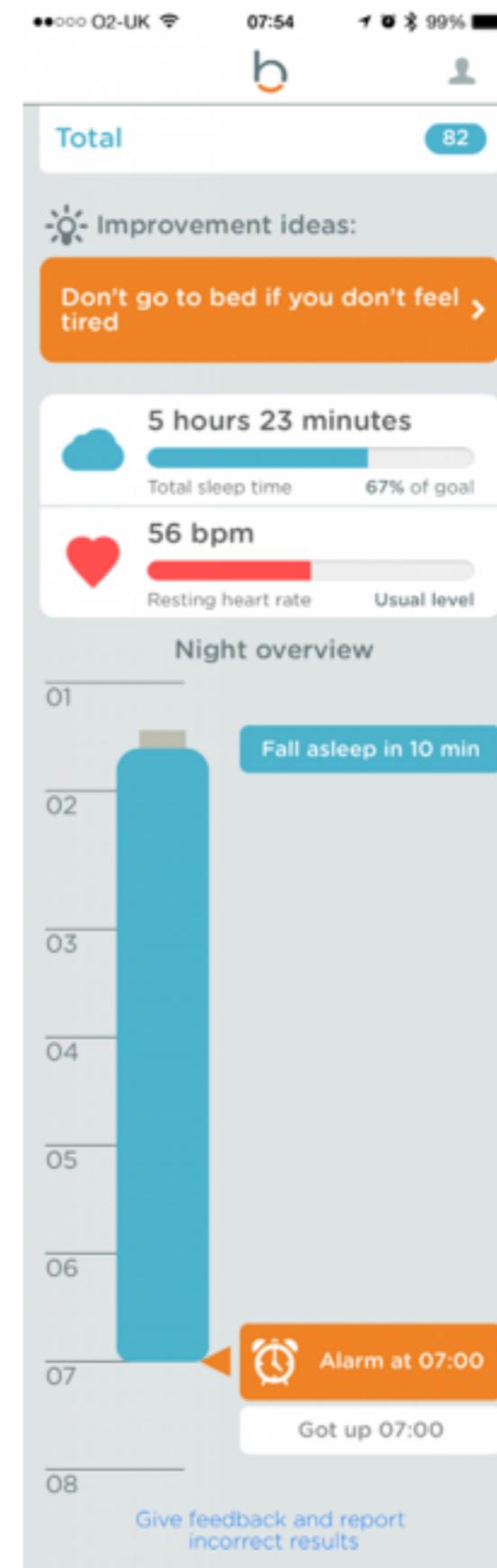
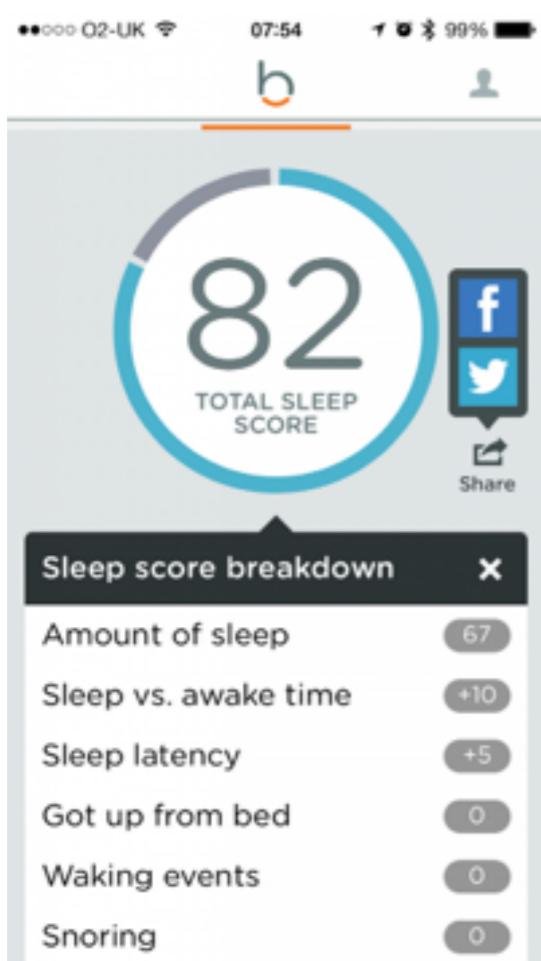


- Aimed at helping ordinary people seize the power of self-tracking
- QS Community participating as early adopters!
- Looking at wide range of self-tracking (suggest something) but health domain is a likely target
- We are hiring!

BEDDIT AUTOMATIC HR SLEEP TRACKING



- Kickstarter project funded last year, shipped to backers, now taking pre-orders
- sensor under sheets senses heart rate and measures sleep depth by heart rate
- reports resting heart rate
- it works!



NEXT?



- Still looking for the holy grail of non-invasive automatic useful sleep tracking!
- If you find apps/devices/ideas for that will let non-geeks self-quantify, let me know!

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