

# THE IMPACT OF LIGHT ON CRIME IN LONDON

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## Can external lighting influence crime?



British Standards Institution (2020) mentioned that street lighting might have an effect on reducing crime and preventing crime opportunities. Some researchers found that external lighting can be used to tackle crime, while other researchers did not find evidence that lightness reduces crime rates.

Investigating the impact of the change in ambient lighting conditions can also provide a wide perspective on the impact of lighting on crime. If ambient light does not make a difference, variations in electric lighting conditions are less likely to matter as they are more subtle than the change from daylight to dark.

## When is it light and dark? - Defining what is light and what is dark is complex

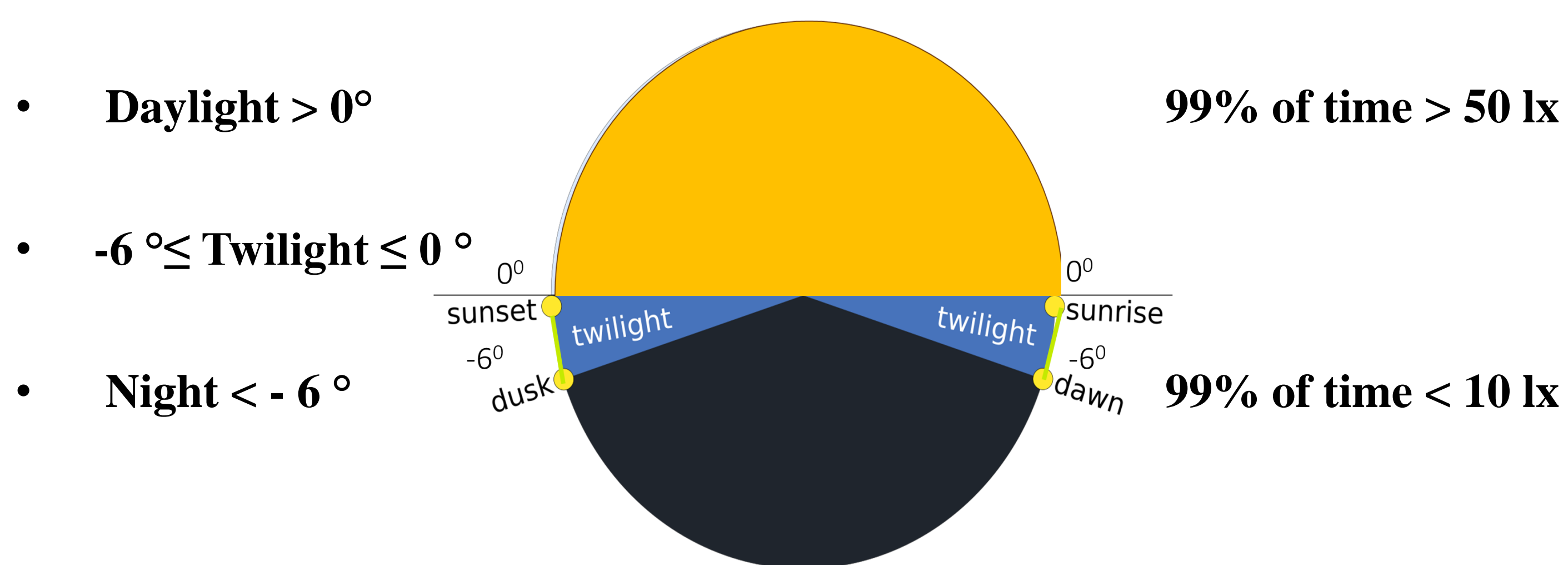
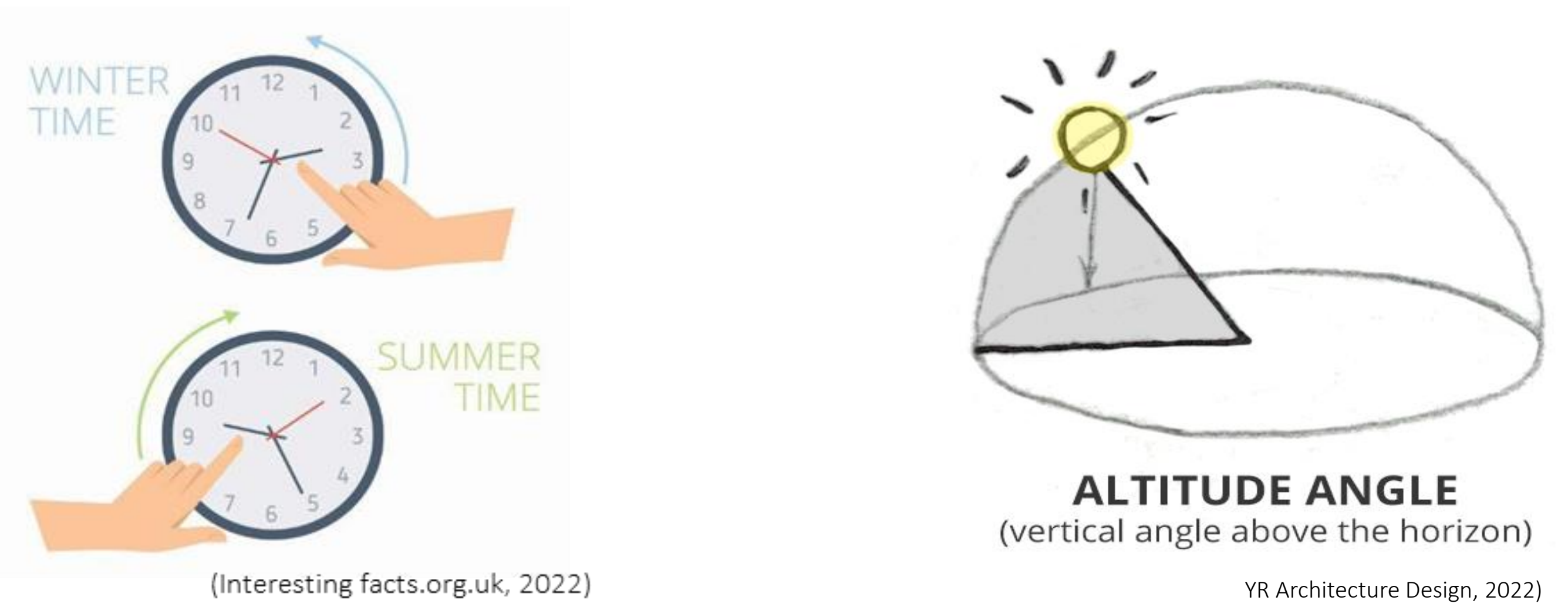


Figure 1

Raynham et al. (2020) provide an accurate and innovative method for defining daylight availability (Figure 1).

## Daylight versus night-time approach



Raynham et al. (2020) stated that clock changes due to Daylight saving enable evaluation and comparison of road incidents that occurred at the same clock time based on comparative light and dark conditions. For example, in the autumn, it is light one week before the clock changes, whereas it is dark at the same time a week after the change. Figure 2 illustrates the change in light and dark times across the spring clock change.



Figure 2

## Preliminary Results

Crime definition		Results		
Major Crime Types	Minor Crime Types	Light	Dark	Light to Dark Change
Arson and Criminal Damage	Criminal Damage	161	183	14%
Burglary	Burglary - Residential	66	105	59%
Drug Offences	Possession of Drugs	262	217	-17%
Robbery	Robbery of Personal Property	117	138	18%
Theft	Theft from Person	142	180	27%
Vehicle Offences	Theft or Taking of a Motor Vehicle	28	46	64%

Light has a role in some crimes. Light may impact other crimes, but further investigation is needed.

## Reference List

- British Standards Institution. Code of Practice for the Design of Road Lighting Part 1: Lighting of Roads and Public Amenity Areas; B.S. 5489-1:2020; BSI: London, UK, 2020.
- Raynham, P., Unwin, J., Khazova, M. and Tolia, S., 2020. The role of lighting in road traffic collisions. Lighting Research & Technology, 52(4), pp.485-494.

