



Figure 1 Bob watching television

1. All the negative traces of WatchTV are of the same length. What is this length? Explain your answer.
2. How many negative traces is described by WatchTV? Explain your answer.
3. How many interaction obligations are there in the semantics of WatchTV?

Let WatchTVModOne be the result of extending the **xalt** construct of WatchTV with a third operand and leaving everything else unchanged.

4. Is WatchTVModOne a general refinement of WatchTV? Explain your answer.
5. Is WatchTVModOne a limited refinement of WatchTV? Explain your answer.

Let `WatchTVModTwo` be the result of replacing every occurrence of `veto` in `WatchTV` with `refuse` and leaving everything else unchanged.

6. How many positive traces is described by `WatchTVModTwo`?
7. Why is it from a methodological point of view more correct to use the `xalt` operand in `WatchTV` instead of the `alt` operand?