**Practice 1. Find cases of hedging in the following extracts.**

**A.**

The available PPI data are incomplete and often noisy, thus the graphs are generally rather sparse and their edges not very reliable.

(from J.K.Aggarwal et al. Combinatorial image analysis)

*The available PPI data appear to be incomplete and frequently distorted, thus the graphs are likely to be sparse and their edges may not be reliable.*

**B.**

A third study found norepinephrine response to bicycle ergometry together with psychological factors and blood pressure responses to mental arithmetic to be relatively weak predictors of future blood pressure classification.

(from F.Arnljot et al. Sympathoadrenal stress reactivity is a predictor of future blood pressure)

*Some of the evidence [3] shows that norepinephrine response to bicycle ergometry together with psychological factors and blood pressure responses to mental arithmetic tend to be unreliable predictors of future blood pressure classification.*

**C.**

The number of iterations of the loop could be reduced if we could show that a still smaller set of (X +a)’s generates a group of the required size. This seems very likely.

…Recently, Hendrik Lenstra and Carl Pomerance [LP2] have given a heuristic argument which suggests that the above conjecture is false. However, some variant of the conjecture may still be true (for example, if we force r > log n).

(from M.Agrawal et al. Primes in P)

*The number of iterations of the loop could be reduced if it is possible to show that a ~~still~~ smaller set of (X +a)’s nonetheless generates a group of the required size. This is highly likely to be the truth.*

*…Recently, a heuristic argument has been given by [LP2] which suggests that the above conjecture is erroneous. However, some variant of the hypothesis may still be correct (for example, if we force r > log n).*

**D.**

A product’s neighbors are other products that tend to get similar ratings when rated by the same user. For example, consider the movie Saving Private Ryan. Its neighbors might include war movies, Spielberg movies, and Tom Hanks movies, among others. To predict a particular user’s rating for Saving Private Ryan, we would look for the movie’s nearest neighbors that this user actually rated. As Figure 1 illustrates, the user-oriented approach identifies like-minded users who can complement each other’s ratings.

(from Y.Koren et al. Matrix factorization techniques for recommender systems)

*A product’s neighbors are other products that tend to receive similar ratings ~~when rated~~ by the same user. For example, neighbors of the movie “Saving Private Ryan” might include films about war, directed by Spielberg, or ones with Tom Hanks ~~movies,~~ ~~among others~~. The prediction of a particular user’s rating for “Saving Private Ryan” is based (established) on the movie’s nearest neighbors that this user has already rated. As Figure 1 illustrates, the user-oriented approach reveals like-minded users who can complement each other’s ratings.*

**E.**

Figure 2 illustrates this idea for a simplified example in two dimensions. Consider two hypothetical dimensions characterized as female- versus male-oriented and serious versus escapist. The figure shows where several well-known movies and a few fictitious users might fall on these two dimensions. For this model, a user’s predicted rating for a movie, relative to the movie’s average rating, would equal the dot product of the movie’s and user’s locations on the graph. For example, we would expect Gus to love Dumb and Dumber, to hate The Color Purple, and to rate Braveheart about average. Note that some movies – for example, Ocean’s 11 – and users – for example, Dave – would be characterized as fairly neutral on these two dimensions.

(from Y.Koren et al. Matrix factorization techniques for recommender systems)

*Figure 2 illustrates this idea for a simplified example in two dimensions. Consider two hypothetical dimensions characterized as female- versus male-oriented and serious versus escapist. The figure shows where several generally agreed movies and a few fictitious users might land on these two dimensions. A user’s predicted rating for a movie, relative to the movie’s average rating, would equal the dot product of the movie’s and user’s locations on the graph, for this model. For instance, it is expected that Gus would love Dumb and Dumber, would hate The Color Purple, and would rate Braveheart about average. Note that some movies – for example, Ocean’s 11 – and users – for example, Dave – would be characterized as fairly neutral on these two dimensions.*

**F.**

For instance, a book laying on a furniture might be picked up by Spark and represented in symbolic terms as (BOOK1 type Book, BOOK1 isOn TABLE). These symbolic statements are stored in the knowledge base Oro and made available to the other cognitive modules. Later, the robot might process a sentence like “give me another book”. The Dialogs module would then query the knowledge base: find (?obj type Book, ?obj differentFrom BOOK1), and write back assertions like (HUMAN desires GIVE\_ACTION45, GIVE\_ACTION45 actsOn BOOK2) to Oro. This would in turn trigger the execution controller Shary to prepare to act. It would ﬁrst call the HATP planner. The planner uses the knowledge base to initialise the planning domain (e.g. find (BOOK2 isAt ?location)), and returns a full symbolic plan to the execution controller. Finally, the controller would execute the plan and monitor its achievement, both for itself and for the human. We present complete examples of similar interactions in Section 4.

(from S.Lemaignan et al. Artificial cognition for social human–robot interaction: An implementation)

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**G.**

However, market players are confronted with some questions, for example regarding the limited price difference for the final consumer between peak and valley hours or the lack of experience in the commercial deployment of some of the technologies. This applies even to technologies that seem, theoretically at least, to be cost-effective. In fact, an EU-27 regulatory framework, covering not only power supply, but also energy supply and ancillary services, would be advantageous for the deployment of storage technologies.

(from H.L.Ferreira et al. Characterisation of electrical energy storage technologies)

*However, market players are generally confronted with some questions, for example regarding the limited price difference for the final consumer between peak and valley hours or the lack of experience in the commercial deployment of some of the technologies. This typically applies even to technologies that seem, theoretically at least, to be cost-effective. In fact, an EU-27 regulatory framework, covering not only power supply, but also energy supply and ancillary services, would be advantageous for the deployment of storage technologies.*