**ACTIVITY 1: UNDERSTANDING HUMAN**

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| **WEBSITE** | https://arxiv.org/pdf/2009.14050 |
| **REFERENCE** | L. Griths, T. & Departments of Psychology and Computer Science. (n.d.). *Understanding Human Intelligence through Human Limitations*. https://arxiv.org/pdf/2009.14050. https://arxiv.org/pdf/2009.14050 |
| **SUMMARY**  (place your 2-paragraph summary) | The paper explores the distinctive qualities of human intelligence by comparing it with artificial intelligence's (AI) capabilities by means of a framework of computational limits. It identifies three basic limitations- time, computation, and communication—that form human cognition. Because of the limitations of survival, explore/exploit trade-offs, and limited lifespans, humans have developed cognitive shortcuts and biases that make them learn from sparse data efficiently. Humans are also limited in their computational capacity, which forces them to decompose difficult issues into smaller, more manageable chunks and draw on prior knowledge. Furthermore, restricted communication calls for systems for knowledge transfer between people and generations, enabling language and cultural institutions to contribute to the cumulative evolution of culture.  Understanding these limitations facilitates the development of AI systems and provides insights into human intelligence. Designing artificial intelligence (AI) systems that resemble humans and studying human cognition are made possible by mathematical techniques such as Bayesian inference, metalearning, and rational metareasoning. The article highlights that although these limitations shape human intelligence, AI systems might not be subject to them. However, there is a chance that AI will gain from comprehending and mimicking parts of human intelligence, especially in fields where effective problem-solving is essential or resources are limited. |
| **CONCEPT/IDEA**  (place your output) | A white silhouette of a person with gears and icons  Description automatically generated |