**Technology and Society**

1. **Human-Machine Integration**:
By 2075, humans may integrate technology into their bodies, with advanced brain-computer interfaces allowing direct interaction with machines and the internet. Cybernetic enhancements might improve physical and mental abilities, blurring the line between humans and machines.
2. **Artificial General Intelligence (AGI)**:
AGI could surpass human intelligence, taking over complex decision-making and innovation. While it may solve many global challenges, its governance and ethical use will remain a contentious issue.
3. **Space Colonization**:
Humans will likely establish permanent colonies on the Moon and Mars, driven by resource needs and population pressures. Space exploration might lead to mining asteroids for rare minerals, altering Earth's economy.
4. **Global Connectivity**:
Advanced communication technologies, possibly using quantum computing, will connect humanity like never before. Language barriers might vanish due to real-time AI translation, fostering greater intercultural interaction.

**Environment and Climate Change**

1. **Radical Climate Engineering**:
To combat climate change, humanity may adopt geoengineering solutions like solar radiation management or carbon capture on a massive scale. These technologies could stabilize global temperatures but come with unpredictable risks.
2. **Biodiversity Crisis**:
Extinction rates may accelerate, leading to a loss of ecosystems. Efforts to preserve biodiversity might include genetic engineering and artificial habitats.
3. **Adaptation to New Environments**:
Rising sea levels and desertification may force entire populations to migrate or live in floating cities and underground or climate-controlled environments.

**Health and Biology**

1. **Longevity Revolution**:
Advances in medicine and biotechnology could extend human lifespans significantly, potentially exceeding 120 years. Aging might be treated as a curable condition, and regenerative medicine will replace damaged tissues and organs.
2. **Designer Humans**:
Genetic engineering may allow parents to select traits for their children, leading to ethical debates about "designer babies" and potential inequalities.
3. **Global Health Challenges**:
While diseases might be eradicated through advanced vaccines and treatments, new threats from engineered viruses or antibiotic resistance could emerge.

**Society and Culture**

1. **Post-Work Society**:
Automation might eliminate most jobs, leading to a post-work economy. Universal Basic Income (UBI) or similar systems could replace traditional employment, shifting societal focus to creativity, leisure, and innovation.
2. **Global Governance**:
Nations might form a unified global government to tackle challenges like climate change, space exploration, and AI regulation. However, cultural and political divisions could persist, threatening unity.
3. **Cultural Transformation**:
Cultural norms may evolve drastically, influenced by virtual experiences, AI-generated art, and diverse global interactions. Traditional identities might merge or adapt in unprecedented ways.

**Main Problems of 2075**

1. **Ethical and Social Inequality**:
Access to advanced technology (e.g., AI, genetic enhancements) could widen the gap between the wealthy and poor, creating a two-tier society.
2. **Loss of Autonomy**:
Over-reliance on AI and automation might lead to a loss of individual decision-making and privacy. AI governance could become a significant issue.
3. **Resource Scarcity**:
Despite technological advances, competition for clean water, arable land, and rare materials may persist, especially with a larger global population.
4. **Climate Refugees and Migration**:
Drastic environmental changes might displace billions, leading to political and social instability.
5. **Existential Threats**:
Humanity could face risks from uncontrolled AI, pandemics, or environmental disasters caused by geoengineering gone wrong. The potential for conflict over space resources might also arise.