





Factsheet No. 8 - February 2023

#### Art creates Al creates art.

What does the German public think about the use of artificial intelligence in art?

(How) does the public perceive that art and cultural objects also shape ideas about AI?

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A recent survey by the Opinion Monitor Artificial Intelligence [MeMo:KI] asked the German population about how they perceive the issue of artificial intelligence in the field of art. The general public can now witness for the first time the creative use of artificial intelligence in art and culture: the program Dall-E can be used to create works of art from texts, a computer can help complete a Beethoven symphony, and OpenAl's chat program ChatGPT writes poems, song lyrics and satire. Talking robots can be seen in museums, and art exhibitions are dedicated to the hype around new concepts, ideas and fears to do with artificial intelligence. But how does the dual role of AI – as both theme and producer of art – shape public opinion about AI? This is precisely the question that our study deals with.



32% of the population had already had contact with art and cultural objects generated by or with Al.

## Contact with art, culture and artificial intelligence

How art, culture and artificial intelligence (AI) are connected is an issue that has increasingly become the subject of public discussion. We asked the German population whether they had had contact in the past year with art and cultural objects that have to do with artificial intelligence, i.e. with objects that either dealt with the issue of AI, or were generated by Al. More than half stated that they had. The data also show that 46% of the population had had contact with art and cultural objects that dealt with the issue of Al. Moreover, 32% had already had contact with art and cultural objects generated by or with AI, meaning that just under a third of the population had already had direct contact with an AI object in a cultural context.

Figure 1: Percentage of population who have in the past year had contact with art and cultural objects to do with artificial intelligence (in %).

56

People who have in the past year had contact with art and cultural objects to do with AI.

46

People who have in the past year had contact with art and cultural objects that address the issue of Al.

32

People who have in the past year had contact with art and cultural objects created by or with AI.

n=1026; respondents who have in the past year had some contact with art and culture (99.9%).





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# Dealing with the issue of Al via the cultural sector differs greatly with regard to the various cultural forms.

While there have been many studies on the portrayal of AI in science fiction films and novels (Bory, Natale & Trudel, 2021; Hermann, 2021), what is often ignored is the audience's perspective. Yet, how AI is portrayed in popular culture can have an impact on popular opinion and understanding with regard to AI, and how it functions (Nader, Toprac, Scott & Baker, 2022). We can therefore assume that other artistic and cultural objects to do with AI will also have an impact on public opinion.

To discover how people interact with and perceive culture and AI, we asked them about their contact with cultural objects that dealt with AI as an issue.

Our survey shows the need to distinguish between the different kinds of cultural object, since there are major differences between them. While 37% of those who had watched a feature film said that they had seen a film that dealt with the issue of AI, that proportion is only 7% among those who had listened to music. Also far ahead in terms of the proportion of content related to AI is the political cabaret (36%), followed by computer games (19%) and novels (18%). Bringing up the rear is the play, which is on a par with the poem (5%), while the concert accounts for the smallest proportion at 3%.

#### Method:

Online survey

#### Executing institute: infas quo

Base population:

German population aged 18 and older who use the Internet at least occasionally

#### Sample:

Weighted random sample (N=1.027)

#### Weighting criteria:

Age, gender and region (federal state)

#### Survey period:

2022, August 29 -September 05 (2022/KW 35)

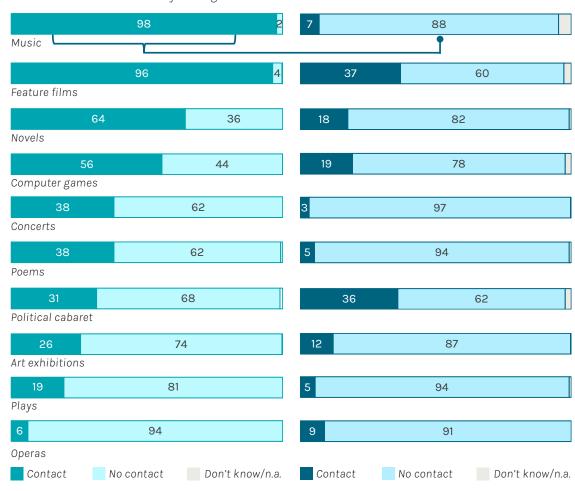
Additional information:
Detailed methodo-

<u>logy overview</u> for the MeMo:KI project

# Figure 2: Percentage of art and cultural objects that people have had contact with that address the issue of artificial intelligence (n=1027, in %).

Percentage of people who have in the past year had contact with art and cultural objects in general:

Percentage of those art and cultural forms that people have had contact with that address the issue of Al:







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66

More than half the respondents are unaware that Al can help create art, or can create it independently.

#### Knowledge about Al-generated art is still very sketchy

Our study is also concerned with knowledge among the population that artificial intelligence is not only a theme in art and cultural objects, but can itself produce these objects. As already stated, almost one third of the population have had contact with Al-generated art or cultural objects. But how many people know that artificial intelligence can be used to create art, or can even create it all by itself?

Our results show that more than half the respondents (52%) are unaware that AI can help create art, or can create it independently, while

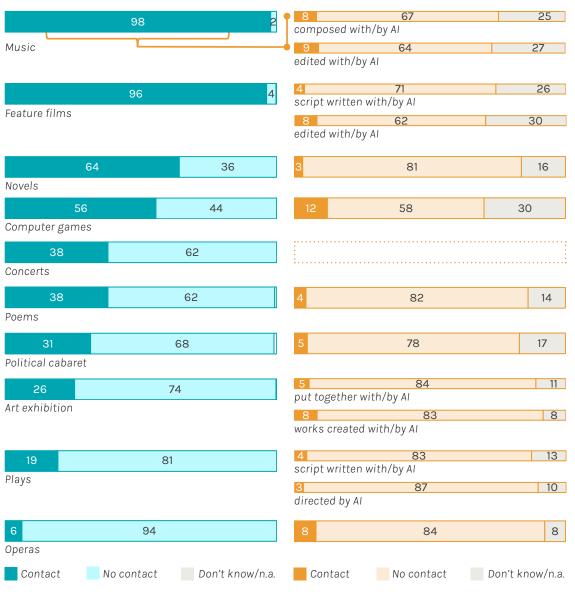
Figure 3: Percentage of art and cultural objects that people have had contact with that are made with or by AI (n=1027, in %).

Percentage of people who have in the past year had contact with art and cultural objects in general:

41% have heard of Al-supported or Al-generated art. Looking at each form of Al-generated art and culture that people have had contact with reveals that they have had less contact with art and culture made by or with Al than they have had with art and culture that address the issue of Al, the proportion of the former not exceeding 12% for any type of cultural object experienced (see Figure 3).

Respondents have the most contact with the phenomenon of Al-supported art with regard to computer games programmed with the help of or by Al (12%). Also attracting a relatively high level of attention is music edited or composed by Al. Respondents have the least contact with Al with regard to the novel, closely followed by the play and the poem.

Percentage of those art and cultural forms that people have had contact with that are made with or by Al:







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artificial intelligence in art is tied up with prejudice or even fear (Moruzzi, 2020), and that the viewer tends to be more negative towards

low

the viewer tends to be more negative towards Al-generated images than images supposedly generated by humans (Ragot, Martin, Cojean, 2020).

Belief in what AI can achieve

However, reactions to such new ways of using

these technologies are not always positive,

previous research suggesting that the use of

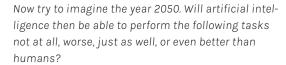
in the arts sector is rather

# Figure 4: Assessments of what AI is capable of today, and what it will be capable of in 2050 (n=1027, in %).

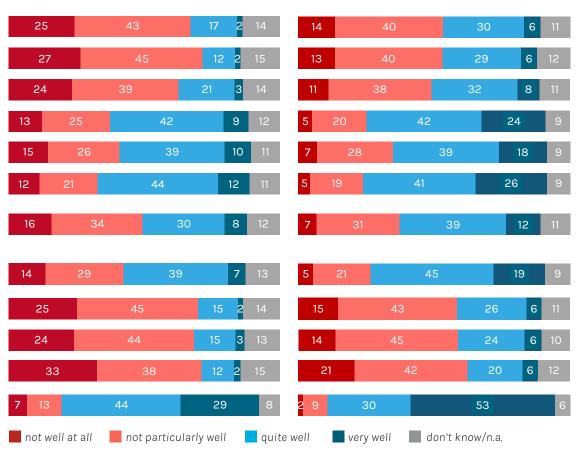
And how good do you think artificial intelligence already is at working independently and without human involvement ...

pulation in the ability of AI to produce art and cultural objects independently and without human involvement, then what emerges is that there is great divergence with regard to the specific cultural product. People see great potential here in the programming of computer games (79%) or in the composition of music (49%). But this is different when it comes to AI writing screenplays (19%) or creating satire (14%) independently. The example of art seems to confirm the trend that the use of AI in the art sector is viewed rather negatively (see Figure 4).

If we look at the belief among the German po-









54% of the respondents would not like to see Al-generated art forms in the future.

### How does the population look to the future?

People are more positive about what AI will be able to do in the future than what it can do today, although their assessment remains rather negative for some forms. It is interesting to note here that the picture seems to be changing when it comes to the creation of artworks, with a good half of the respondents ex-

pecting AI to be able to create good or very good works of art independently in 2050, while only 38% are or tend to be unconvinced of this (see Figure 4). Our study shows that such attitudes are reinforced if respondents have already had contact with art or cultural objects generated by AI. This means when it comes to creating works of art that 58% in this group expect AI to perform well or very well in 2050, while only 35% expect it to perform badly or very badly.





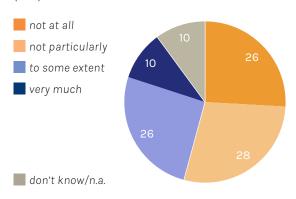
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But does this mean that we will see, hear or read more art and culture created by AI in the future? What our data show is: No, not necessarily. More than half the respondents would not like to see Al-generated art forms in the future (see Figure 5).

#### Figure 5: Assessments whether the German population would like to see Al-generated art and cultural objects in the future.

How much would you like to see, hear, read or visit an artistic contribution or a cultural event in the future <again> where artificial intelligence has generated it independently and without human involvement? (in %)



n= 1027, respondents who have in the past year had some contact with art or a cultural object; <> was only shown to appropriate respondents.

#### Summary

The survey shows that almost half the population have already had contact with art and culture that deal with AI as an issue, and that 32% have had contact with art and culture created by or with AI. Thus, about a third of the population have already seen Al-generated art, while half the population are not aware that such art is possible. As for the belief in what AI is capable of in creative processes, the results show that people are rather sceptical - which is in line with the current state of possibilities. However, people are more confident about the future. This is especially true for those who have already had contact with Al-generated art. In summary, however, we can state that a large proportion of the population are against experiencing art that AI has created wholly or partially. At is largely accepted as a support, but not as an independent producer, in the creative process.

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