To answer or not to answer – Assessing drivers of item-nonresponse among young respondents

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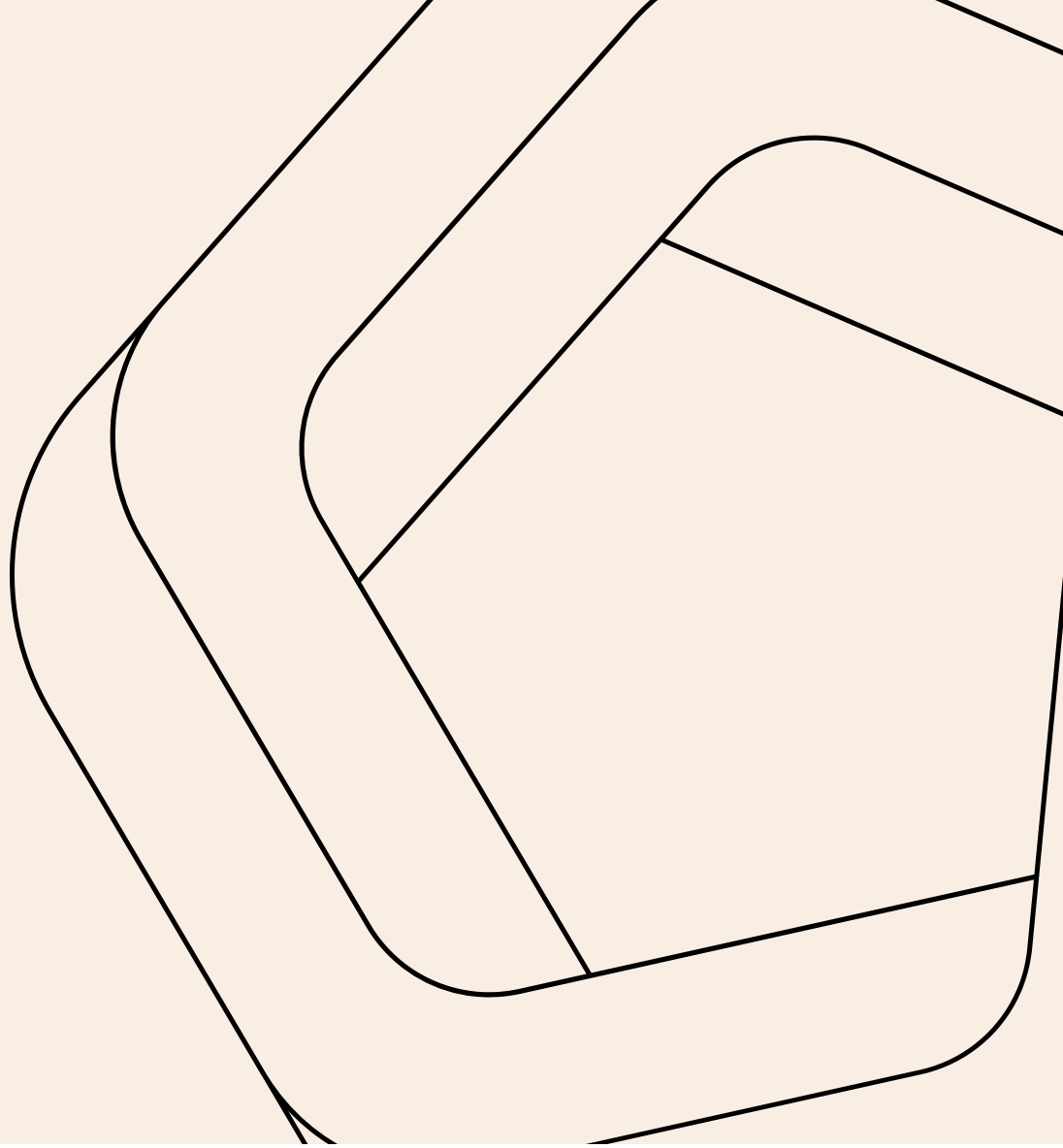


verian

Background & Motivation

Verian has recently conducted various youth studies that required young respondents to answer questions related to complex societal and political attitudes

Study 1: The future? Ask the youth! 2023 (Federal Environment Ministry + Agency)

- CAWI-Sample: 14 to 22-year-olds (German-speaking residents), *N* = 1.150
- Recruiting: Online Access Panel (Payback)

Study 2: GenNow - Young engagement for social change (Bertelsmann foundation)

- CAWI-Sample: 16 to 30-year olds, (German-speaking residents), *N* = 2.532
- Recruiting: Online Access Panel (Payback)

Study 3: Generation Germany 2024 (Children for a better world e.V.)

- CAWI-Sample: 16 to 24-year-olds (German-speaking residents, *N* = 3.822)
- Recruiting: Mix of Online Access Panel (Payback) and convenience sampling

Which item features in the context of political and societal topics are especially challenging for young people and how can we adapt our survey design to improve answerability?

Research Questions

RQ1 (Relevance & magnitude):
Do questions related to societal or political attitudes produce higher nonresponse rates than non-political topics? If yes, to what extent?

RQ2 (Characteristics & context):
Can we identify substantial item characteristics among political items that drive nonresponse? How do they interact with person characteristics or context variables?

RQ3 (Implications & solutions):
Which concrete implications for questionnaire design can be drawn from our results? What do best-practice examples look like?

Quantitative analysis of data from 3 representative online surveys (CAWI) of young German adults (14-30 years) → Total N = 7.504

Theoretical background

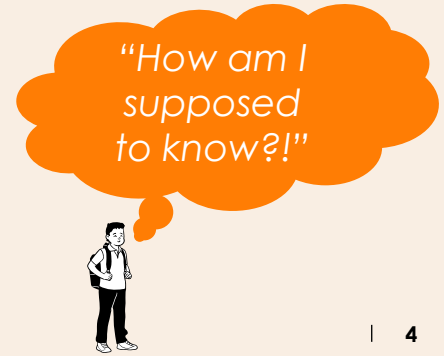
What makes political items more challenging for young people?

- Young respondents have limited knowledge of systemic politics (Delli Carpini & Keeter, 1996)
- Cognitive processes required to provide a valid answer (Bradburn et al., 2004):

Comprehension of the question → Retrieval of relevant information → Judgement based on the relevant information → Mapping the answer to the response scale

- Two primary cognitive drivers of nonresponse (Beatty & Herrmann, 2002)
  1) Missing ability (e.g. lack of knowledge)
  2) Missing willingness (e.g. lack of motivation)
- Nonpolitical items (e.g., *"I can rely on my skills in difficult situations.")*
  - *Relevant information can be accessed from young respondents' personal experiences in many contexts*
  - *Difficulties most likely only occur later in the response process (e.g. lack of motivation to form a valid judgement)*
- Political items *(e.g.,"We need more economic growth in the future, even if this ...)*
  - *Relevant information or attitudes might not be accessible at all → "don't know" as a valid answer*
  - *Even if a valid answer can be given, it requires far more effort*

→ Higher likelihood of "don't know" answer as a safisticing strategy (Krosnick, 1991)



RQ1: Item-nonresponse for politically charged questions

Hypotheses & Method

H1a: Items addressing societal or political attitudes lead to higher nonresponse rates among young respondents than those solely based on personal experiences or preferences.
H1b: The effect decreases with age.
H1c: The effect is stronger among respondents with lower political interest/ self-efficacy.

Data Preparation

Coding of item meta data

- Structural features
- **Content classification (AI supported): Does this question relate to political attitudes or not? (yes/no)**
  - *Ex. (yes): "I think it is good that the EU exists."*
  - *Ex. (no): "I feel shy around other people."*

Attachment to survey data in long-format

→ Unit of analysis: Response to a single item by a person

Statistical Analysis:
Multilevel Logistic Regression (GLMM)

$p(\text{Nonresponse}) =$
$\text{logit}^{-1}(\beta_0 + \beta_1 * \textbf{itemContent}$ (political vs. nonpolitical) $+$

$\beta_2 * \text{itemWordCount} +$
$\beta_3 * \text{itemPosition} +$
$\beta_4 * \text{respondentCharaceristics}^1$ (age, political interest, ...) $+$

$\beta_{5..n} *$ **itemContent x respondentCharacteristics** $+$

U_i (random intercept for individual nonresponse tendencies))

[1] Indicators for political interest, knowledge or self-efficacy varied across studies

RQ1: Item-nonresponse for politically charged questions

Descriptive results

Study 1: UBA (Environment & Climate change)

Item type	Ø nonresponse					
	All respondents	Age group			Political interest	
		14-16	17-19	20-22	low	high
Political	**5,7%**	7,6%	5,5%	4,0%	**9,6%**	**4,5%**
Non-political	**1,6%**	2,4%	1,3%	1,1%	2,3%	1,3%
All items	5,0%	6,7%	4,7%	3,5%	8,3%	4,0%

Base: *N* (respondents) = 1.150, *N* (items) = 100 (82 political, 18 non-political)

Study 2: GenNow (Political Engagement)

Item type	Ø nonresponse				
	All respondents	Age group		Political self-efficacy	
		16-24	25-30	low	high
Political	**3,9%**	3,9%	3,9%	**5,0%**	**2,0%**
Non-political	**2,9%**	2,8%	3,1%	3,4%	2,0%
All items	3,4%	3,3%	3,5%	4,1%	2,0%

Base: *N* (respondents) = 2.532, *N* (items) = 87 (40 political, 47 non-political)

Study 3: GenGer (Tolerance & Democracy)

Item type	Ø nonresponse				
	All respondents	Age group		Political self-efficacy	
		16-20	21-24	Low	high
Political	**3,3%**	3,6%	3,0%	**3,8%**	**2,9%**
Non-political	**2,1%**	2,2%	2,0%	2,1%	2,1%
All items	2,9%	3,1%	2,6%	3,2%	2,6%

Base: *N* (respondents) = 3.822, *N* (items) = 71 (46 political, 25 non-political)

RQ1: Item-nonresponse for politically charged questions

Results from multilevel regression

H1a: Higher nonresponse for political items

Study 1 (UBA)	Study 2 (GenNow)	Study 3 (GenGer)
✓ OR: 3.18	✓ OR: 1.33	✓ OR: 1.76

→ ***Political content is associated with higher item nonresponse***

H1b: Moderating effect of age

Study 1 (UBA)	Study 2 (GenNow)	Study 3 (GenGer)
✗	✗	✗

→ *No age x political content interaction*

H1c: Moderating effect of political interest (Study 1) and political self-efficacy (Study 2)

Study 1 (UBA)	Study 2 (GenNow)	Study 3 (GenGer)
✓	✓	✗

→ *Political interest/self-efficacy reduces the effect of political content on item nonresponse in 2 of 3 studies*

→ ***The difficulty in answering political questions depends more on political interest or self-efficacy than on age (However, generally political knowledge and self-efficacy increase with age)***

RQ2: Differences in nonresponse within political items

Political Items differ in their **experiential distance**

- Items with low experiential distance address **personal relevance and everyday experiences**
  - *Ex. 1 "I have taken part in demonstrations or assemblies."*
  - *Ex. 2 "I would pay more for products and services if I were sure that the money would be used for climate protection"*

- Items with high experiential distance focus on **abstract, institutional, or systemic aspects**
  - *Ex. 1 "On the whole, democracy in Germany works well."*
  - *Ex. 2 "Do you feel that politicians and decision-makers can make a difference on issues that are important to you?"*

- With increased experiential distance
  - More knowledge and experience (e.g., of systemic politics) is required to give a valid answer
  - **Cognitive and motivational accessibility** for young people decreases

H2: Items with that concern distant, systemic aspects of politics and society are more likely to elicit nonresponse among young adults than items more closely related to more concrete everyday experiences.

RQ2: Differences in nonresponse within political items?

Results for experiential distance

Descriptive Results

Study 1: UBA (Environment & Future)

	Low distance	Mid distance	High distance
Ø Nonresp.	4,5%	4,1%	**8,1%**

Base: *N* (respondents) = 1.150, *N* (items) = 82 (19 low distance, 32 mid distance, 31 high distance)

Study 2: GenNow (social/political engagement)

	Low distance	Mid distance	High distance
Ø Nonresp.	**4,7%**	3,8%	3,3%

Base: *N* (respondents) = 2.532, *N* (items) = 40 (13 low distance, 15 mid distance, 12 high distance)

Study 3: GenGer (Tolerance & Democracy)

	Low distance	Mid distance	High distance
Ø Nonresp.	**4,1%**	2,4%	3,1%

Base: *N* (respondents) = 3.822, *N* (items) = 40 (16 low distance, 11 mid distance, 19 high distance)

*Support from Multilevel Regression?**

* *Same approach as for H1, but with experiential distance (low, mid, high) instead of political content as main item feature of interest*

→ Item nonresponse is more likely for high distance than for mid (OR: 1.25) or low (OR:1.57) distance items
→ Stronger effects for later questions

Possible Explanations?

1) Experiential distance depends on the respondent
→ Highly interested and motivated sample

2) Concrete items facilitate "informed nonresponse"
→ "Don't know" can be a valid answer after all

RQ2: Differences in nonresponse within political items?

Political items differ in their judgment type

- **Normative items** activate **personal values, intuitive attitudes**, and **identity-based** responses
  - *Ex. "It makes me proud that young people in particular are strongly committed to climate protection."*
- **Analytical items** demand **evaluation, factual understanding**, or **attribution of responsibility**
  - *Ex. "More environmental and climate protection in housing construction leads to higher rents."*

- Judgement type can vary (relatively) independently of experiential distance
  - *Ex "It is very important to me to live in a democracy." → abstract, but normative*
  - *Ex. "Our local politicians have a connection to the people they represent." → more concrete, but analytical*

- Analytical questions require **more specific political knowledge**
- Especially younger respondents may **lack the confidence or competence** to provide respective judgments

H3: Items that require analytical or evaluative judgments produce more nonresponse among young respondents than items that allow normative or opinion-based responses.

RQ2: Differences in nonresponse within political items?

Results for judgement type

Descriptive Results

Study 1: UBA (Environment & Climate change)

	Normative	Analytical
Ø Nonresp.	4,0%	9,6%

Base: *N* (respondents) = 1.150, *N* (items) = 82 (57 normative, 25 analytical)

Study 2: GenNow (Political engagement)

	Normative	Analytical
Ø Nonresponse	3,2%	5,1%

Base: *N* (respondents) = 2.532, *N* (items) = 40 (26 normative, 14 analytical)

Study 3: GenGer (Tolerance & democracy)

	Normative	Analytical
Ø Nonresponse	3,4%	2,1%

Base: *N* (respondents) = 3.822, *N* (items) = 46 (42 normative, 4 analytical)

*Support from Multilevel Regression?**

** Same approach as for H1, but judgement type (normative vs. analytical) instead of political content as main item feature of interest*

→ Item nonresponse is significantly more likely for analytical items (OR: 3.01)
→ Stronger effect for high political interest (→ overthinking?)

→ Item nonresponse is significantly more likely for analytical items (OR: 1.13)
→ Stronger effect for low political self-efficacy and low education

No significant effect of judgement type
→ Limitation/Explanation: Almost no analytical items in this study

RQ1/2: Summary

RQ 1: Influence of political content on item nonresponse

Items related to political attitudes generally lead to higher nonresponse rates among young respondents, especially those low in political interest or political self-efficacy

RQ2: Differences in nonresponses between different types of political items

- Political items can vary across separate dimensions (experiential distance, judgement type)
  - Experiential distance → weak evidence for association with nonresponse (1 of 3 studies)
  - Analytic judgements → more consistently associated with nonresponse (2 of 3 studies)
  - Both dimensions can yield independent influence on nonresponse
- Inconsistent results for moderating influence of political interest and self-efficacy in analytical items

  → Paradox moderating effect of political interest in study 1: young respondents with high political interest might be more sensitive to the complexity of analytical questions and may therefore more often chose the "don't know" option than young respondents with less interest or knowledge (cf. "Dunning Kruger Effect")

RQ3: What are the implications and possible solutions?

Practical Implications

1) Reconsider item content

- Concrete examples instead of abstract concepts should increase accessibility
- Trade-off: multiple concrete items (risk of fatigue) ←→ one or very few abstract items (risk of distance)

2) Reframe required judgement

- Normative (personal, value-based) instead of analytical framing might increase respondents' confidence
- Reconsider: What is your research question? Does it require analytical judgements?

3) Activation of knowledge

- A priori explanations of crucial concepts may establish or refresh knowledge required to give valid answers

RQ3: What are possible solutions? Examples from our study

Scenarios can reduce abstraction and foster intuitive judgements on complex questions

Ex.1: Scenario based, concrete task

Imagine that the state is given additional money in the amount of 100 billion euros in the form of debt to combat the current crises. How would you divide this money between the following policy areas?

Please put the following policy areas in order - first in which area the most money should be invested and last in which area the least money should be invested.

1 Strengthening the education system
2 Better financing of the healthcare system
3 More military spending
4 More humanitarian aid and support for refugees
5 Strengthening the competitiveness of German companies
6 More support for socially disadvantaged people
7 More environmental, nature and climate protection

Don't know (→ Ø 2,2 %)

Ex. 2: Repeated analytical judgements

Are the following actors in Germany doing enough for environmental and climate protection?

Please indicate whether in your opinion enough, rather enough, not enough or not enough is being done.

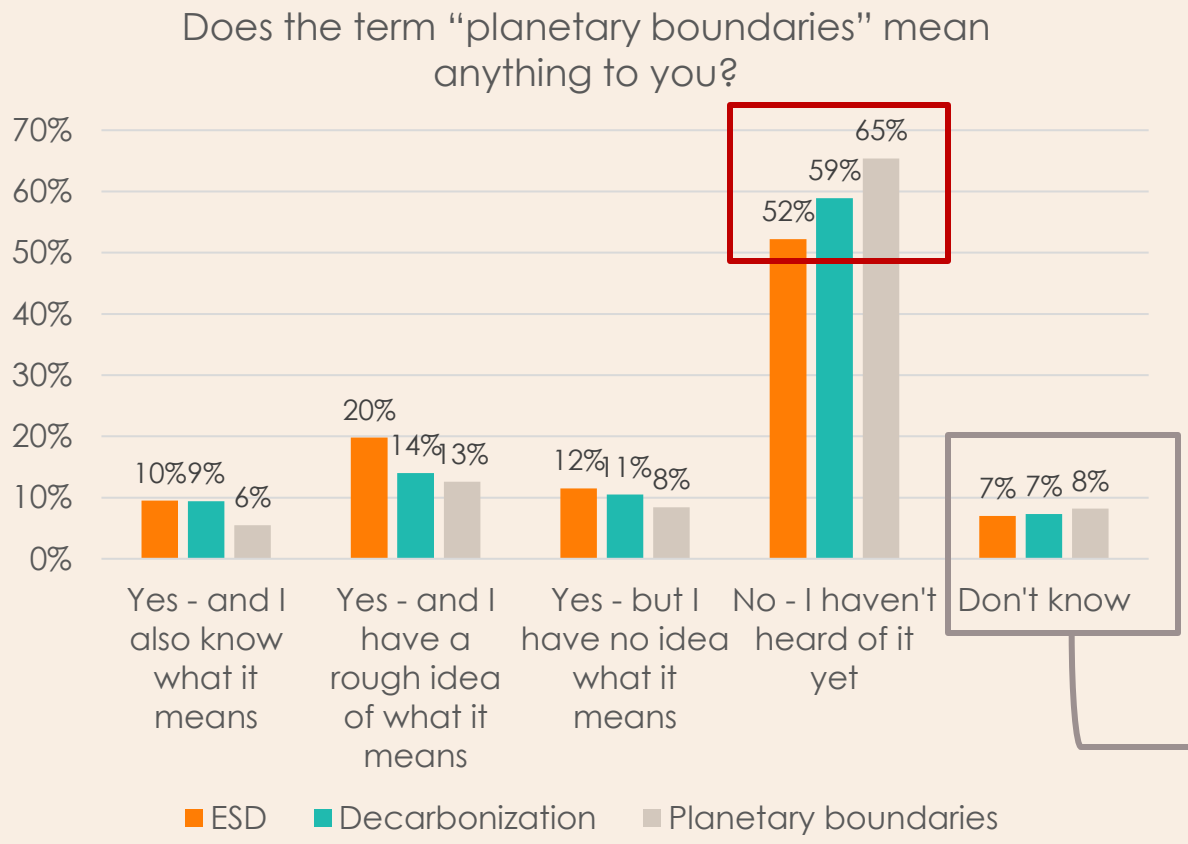
1. From each and every individual
2. Environmental associations and initiatives
3. From cities and municipalities
4. From the federal government
5. From industry and business
6. From the media
7. From schools and other educational institutions
8. From scientists
9. From courts and the judiciary

++ = Enough , + = Rather enough , - = Rather not enough, - - = Not enough, ***I don't know (→ Ø = 10,4%)***

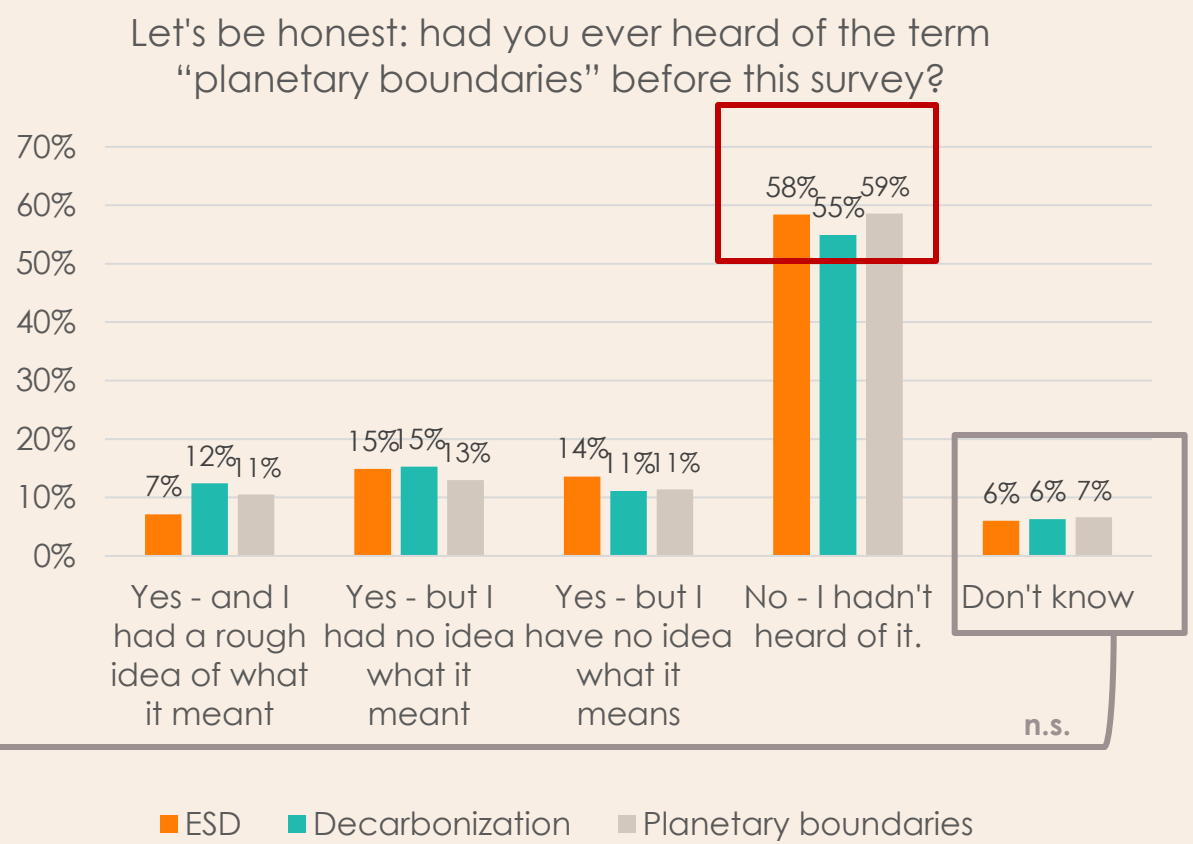
RQ3: Knowledge activation via definitions: Survey experiment

Influence of the definition of 3 terms on the young respondents' judgment of familiarity

Split-Sample 1: Judgment prior to definition



Split-Sample 2: Judgment after definition



Thank you for your attention!

Feedback, Questions?

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