AS Psychology Paper 1 Mark Scheme

Question Number	Answer	Mark
1(a)	AO2 (2 marks)	(2)
	One mark for each feature identified up to a maximum of two marks.	
	 Legitimate authority of the police officer (1) 	
	 Proximity of the police officer was immediate (1) 	
	 Uniform of the police officer (1) 	
	 Lack of support if Emma is on her own (1) 	
	Look for other reasonable marking points.	
	Answers must relate to the scenario.	
	Generic answers score 0 marks.	

Question Number	Answer	Mark
1(b)	AO2 (1 mark), AO3 (1 mark)	(2)
	One mark for identifying a factor (AO2).	
	One mark for an explanation of that factor (AO3).	
	For example:	
	 Perceived level of authority (1) as he may not have been in uniform, so she questioned his authority (1). 	
	OR	
	 Her own views are important to her, and she is less affected by others (1) so may not have complied with the authority figure (1). OR	
	 Individual differences in Emma's personality (1) may have led her to obey less than someone with a different personality might have done (1). 	
	 Emma was in an autonomous state (1) and took responsibility for her own behaviour (1). 	
	Look for other reasonable marking points.	

Question Number	Answer	Mark
2(a)(i)	AO2 (2 mark)	(2)
	One mark for a feasible closed question.	
	Ignore open questions; accept any type of closed question, including ranked scale/rating scale.	
	Must be linked to gauging the perceptions of teenagers. For example:	
	Do you find teenagers easy to get along with? (closed ended; yes/no) (1)	
	2) On a scale of 1-5 (where 5 is very friendly and 1 is not friendly), how friendly would you rate teenagers? (1)	
	Place the following statements in order of your agreement with each:	
	- I want to spend a lot of time with teenagers.	
	 I do not want to spend any time with teenagers. 	
	 I would not mind spending more time with teenagers (1). 	
	Look for other reasonable marking points.	
	Answers must relate to the scenario.	
	Generic answers score 0 marks.	

Question Number	Answer	Mark
2(a)(ii)	AO1 (1 mark)	(1)
	One mark for stating that quantitative means gathering numerical data.	

Question Number	Answer	Mark
2(a)(iii)	AO2 (2 marks)	(2)
	One mark for identifying an appropriate analysis technique and one mark for how it would be used.	
	No marks if the answer does not match either the question type (closed) or the data type stated (quantitative).	
	For example:	
	Quantitative data	
	 Count the number of no/yes/scale responses (1) and add up the totals to see if there are any trends (1). 	
	 Use measures of central tendency/total/measures of dispersion (1) to analyse frequency/average/spread (1). 	
	 Use a statistical test (1) to analyse the significance of the results (1). 	
	Look for other reasonable marking points.	
	Answers must relate to the scenario.	
	Generic answers score 0 marks.	

Question Number	Answer	Mark
2(b)	AO1 (1 mark), AO3 (2 marks)	(3)
	One mark for identifying an appropriate research method (AO1).	
	Two marks for justifying the chosen research method, to show how it would link to research into prejudice (AO3).	
	Accept interview, experiment (field, lab), observation, case study, correlation (if data are not gathered by questionnaire), content analysis, meta-analysis.	
	To gain marks each point suggested must be ethical.	
	For example, interview (accept structured interview, unstructured, semi-structured):	
	 An interview would allow participants to talk about their opinions and beliefs about prejudice (1). 	
	 The researcher would acquire rich, in depth data about participants' prejudiced or non-prejudiced attitudes to others (1). 	
	 Unstructured interview would allow respondents more freedom of response, so data would be more valid than using a questionnaire (1). 	
	For example, case study:	
	 One individual could be studied over a period of time using a case study to record their behaviour towards and thoughts about others (1). 	
	 The researcher could choose an individual with a role where they interact with different cultures, so might be in a position to discriminate or show prejudice (1). 	
	 And record their responses (thoughts and behaviour) to situations where prejudice might occur, so data would be more valid and relevant than using a questionnaire /A case study like this would be hard to replicate as the individual is unique and the situation is unique, so there might be a lack of reliability unlike using a questionnaire (1). 	

Question Number	Answer	Mark
2(b) cont.	 For example, content analysis: One or more newspapers could be content analysed, over a set period of time, to focus on prejudiced attitudes (1). 	
	 The researcher could use a highlighter pen, reading the whole newspaper(s) to spot any mentions of discrimination or prejudice such as adjectives or situations (1). 	
	 And then sort them into categories such as 'non- prejudiced' and 'prejudiced', an ethical idea as no participants are used, unlike using a questionnaire (1). 	
	Look for other reasonable marking points.	

Question Number	Answer	Mark
3(a)	AO1 (2 marks)	(2)
	One mark for each of two ways Sherif et al. used to create conflict, up to 2 marks.	
	 Competitive games between the groups (1) Differential rewards (1) Competition for trophies (1) Tug of war (1) Baseball game (1) Medals awarded (1) Tent pitching (1) Swimming gala (1) Pocket knife prize (1) 	
	Look for other reasonable marking points.	

Question Number	Answer	Mark
3(b)	AO2 (1 mark), AO3 (2 marks)	(3)
	One mark for suggesting a way to reduce prejudice (1 AO2).	
	Two marks for justification of it (2 AO3).	
	For example:	
	Introduce cooperative activities for students to carry out	
	 Introduce cooperative activities for students to carry out so that there is a goal they have to work together to achieve/so that there is a superordinate goal (1). 	
	 The students could be asked to work together as a team to pick up litter around the school/to tidy up when their school is being judged for a 'tidiest in the county' award (1). 	
	 Sherif et al.'s research shows that when boys cooperated to achieve a common goal there was less conflict, so the students should start to work together and conflict will be reduced as desired (1). 	
	OR	
	Equal status contact	
	 Make sure that students are treated equally/level playing field, so that when they meet up they see each other as equal (1). 	
	 Do not encourage a hierarchy, such as prefects and non-prefects (1). 	
	 Introduce uniforms and standard equipment that all students have to wear and use so that they are all equal and see themselves as equal. Then they would accept others from different groups from themselves – when the students see themselves as equal they will be in the same state as the boys when co-operating together (1). 	
	OR	
	Decategorisation	
	 Form the students into one group on the basis of belonging to the school and decategorise (1). 	
	 This means encouraging them to see themselves as all being in one group as part of the school and not as separate groups (1). 	
	 This should achieve the same reduction of prejudice as aiming for superordinate/shared goals achieved in the Sherif et al. study (1). 	
	Look for other reasonable marking points.	

Question Number	Answer	Mark
4(a)(i)	AO2 (1 mark)	(1)
	One mark for identifying the modes for the data subset.	
	5	
	AND	
	8	

Question Number	Answer	Mark
4(a)(ii)	AO2 (1 mark)	(1)
	One mark for correct reason.	
	Because this small data sample will not give a valid value.	

Question Number	Answer	Mark
4(b)	AO3 (2 marks)	(2)
	An explanation that makes reference to the following two points.	
	 Standard deviation is best because it takes account of all the figures. 	
	 Therefore the outliers have less of an effect on the dispersion. 	
	Look for other reasonable marking points.	

Question Number	Indicative content	Mark
5	AO1 (4 marks), AO3 (4 marks)	(8)
	Credit any contemporary study used in research on social behaviour	
	Three contemporary studies are given in the specification that could be used in this answer, and such comments as follows could be given:	
	Burger (2009) AO1	
	Was investigating obedience.	
	 Replicated Milgram's procedure using electric shocks with confederate and learners. 	
	 Designed his experiment so his participants went up to just 150 volts. 	
	 Participants had verbal prods and did not know that the 'victim' was a confederate. They also did not know that the shocks were not real. 	
	Used artificial tasks.	
	 Had a sample of 70 participants (29 men, 41 women). 	
	Used a volunteer sample.	
	 Was designed to investigate the situational effect vs personality effects. 	
	Was constrained by ethics.	
	 Deceived his participants in terms of the role of the confederates and the shocks not being real. 	
	AO3	
	 Based on previous well known research so has previous data to use for comparisons. 	
	 Supported Milgram's work by showing that situational effects were significant but also showed that there are personality differences in social influence behaviour. 	
	 Lab conditions meant ecological validity was an issue but also meant controlled conditions were used so internal validity improved. 	
	 Also artificiality of tasks means mundane validity is an issue and so the extent to which the findings can be applied to everyday understanding of human behaviour is limited. 	
	 Ethically deception is an issue but required for successful/valid outcome. 	

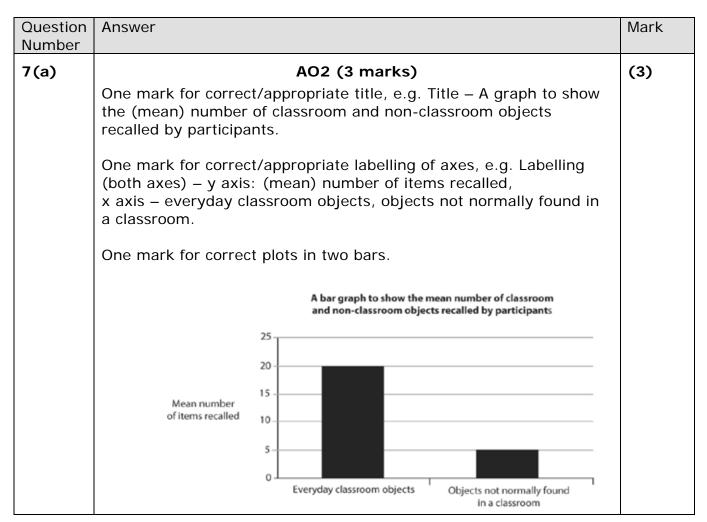
Question Number	Indicative content	Mark
5 cont.	 Only using 150 volts makes the study less traumatic for participants but maybe did not test obedience as well as Milgram had done. 	
	 Sample was limited and volunteers might suffer bias from self-selection issues i.e. types of participants might be skewed and small sample might not be representative of general public. 	
	 However 80 is considered an appropriate number for this type of study for a medium sized effect to be significant. 	
	Credit any other reasonable comment on the quality of study	
	Reicher and Haslam (2006)	
	AO1	
	 Reicher and Haslam (2006) set up a study with the BBC as an experiment that would be televised. 	
	 Was looking at situational explanations of conformity and obedience. 	
	 They allocated participants to one of two groups, prisoners and guards, and set up a mock prison. 	
	 Their aim was to see if there would be in-group and out- group behaviour. 	
	 The looked at how this would affect the levels of conformity and obedience. 	
	 To see what the effect of the role would be on the behaviour. 	
	AO3	
	 They found that prisoners did become an in-group in the end, but the guards resisted this influence. 	
	 They showed that authority alone cannot predict tyranny. 	
	 Because the prisoners did conform to their role, they proposed that it might be weakness that allows tyranny to rule. 	
	The two groups were arbitrarily created, so this removes bias in allocation.	
	 But certain types of personalities of people might have been included in the groups by chance, and so the situational influence might not be the only explanation for the level of obedience and/or conformity. 	

Question Number	Indicative content	Mark
5 cont.	 Reicher and Haslam's situational manipulation was artificial, and so the measurement of level of conformity has less ecological validity. 	
	 Reicher and Haslam included an element of authority within the groupings and so might not only be measuring situational influence. 	
	 The effect on the participants of being observed might have been that they were role playing and not behaving naturally. 	
	The promotion of prisoners to guards made the study less realistic and so compromises mundane validity.	
	Credit any other reasonable comment on the quality of study	
	Cohrs et al. (2012) AO1	
	 Cohrs et al. (2012) carried out a study looking at personality and prejudice including social dominance and authoritarian personality and prejudice. 	
	 Their study was carried out in Germany. 	
	 It was a correlational piece of research. 	
	 They found that personality did link to prejudice. 	
	 They also looked at whether peer-report data would match self-report data as they commented that studies into prejudice, like theirs, tended to use just self-report data. 	
	They found that self-report data did match peer-report data.	
	AO3	
	 The study could explain the prejudice effects based on individual personalities of the participants as opposed to situational effects. 	
	The study focused on personality effects and so produced an in depth level of data on this aspect of prejudice.	
	 They found that the effects of personality on prejudice are mediated by Right wing Authoritarianism and Social Dominance Orientation. 	
	 Using qualitative methods introduces subjectivity. 	
	 But comparing two techniques of self-report and peer reports introduces a check on this subjectivity and found agreement between the two techniques. 	

Question Number	Indicative content	Mark
5 cont.	 However, the applicability of the research to understanding human social behaviour is limited as the research is only correlational. 	
	 The study was conducted on only one culture, so population validity is an issue. It was conducted only in Germany, although by using a large sample the historical nature of the culture could have resulted in a social desirability effect when answering questions concerning prejudice towards the target groups studied. 	
	 The limited nature of the sample introduces ecological validity and so a problem in extending the findings to other situations. 	
	 The particular dimensions of agreeableness and openness to experience can predispose particular world views and motivations that can result in adopting prejudiced ideals, suggesting that individual differences in personality can explain prejudice in society. 	
	Credit any other reasonable comment on the quality of study	

Level	Mark	Descriptor			
	AO1 (4 marks), AO3 (4 marks)				
	Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.				
Level 0	0	No rewardable material.			
Level 1	1–2 marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)			
Level 2	3–4 marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)			
Level 3	5–6 marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. Leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)			
Level 4	7–8 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)			

Question Number	Answer	Mark
6	AO1 (2 marks) One mark for defining encoding and one mark for defining capacity. For example: Encoding • Transforming sensory experience into a form that can be held/used by the memory system (1). Capacity	(2)
	 The amount of information that can be stored by the memory system (1). Look for other reasonable marking points. 	



Question Number	Answer	Mark
7(b)	AO2 (1 mark), AO3 (2 marks)	(3)
	One mark for correct prediction using reconstructive memory theory (AO2).	
	Two marks for correct analysis of the figures in support of this prediction (AO3).	
	Example:	
	 Reconstructive memory predicts that there should be more of the everyday objects remembered than the unfamiliar ones. These results support this (1). 	
	 People recall what they have seen based on an expectation of what is in a classroom rather than actuality (1). 	
	 People recall expected objects more than unexpected objects with 20 everyday objects compared to only 5 objects not normally found in a classroom, showing that schemas are used/memory is not like a tape recorder (1). 	
	Look for other reasonable marking points.	

Question Number	Answer	Mark
7(c)	AO3 (2 marks)	(2)
	Up to two marks for explaining one way in which the investigation could be improved.	
	 Writing on a blank sheet would be better (1), so the method would be a measure of what the participants could recall / as it would mean no memories were missed by the list as the list could not contain all the objects that a participant might think of (1). 	
	 Barbara could have used a less familiar object than a tea pot (1) because it is less likely to be part of the classroom schema (more out of place) (1). 	
	Look for other reasonable marking points.	

Question Number	Answer	Mark
8	AO2 (1 mark), AO3 (2 marks)	(3)
	One mark for identification of the problem (AO2).	
	Two marks for justification (AO3).	
	For example:	
	 Working memory splits short-term memory into different parts, including phonological loop (1). 	
	 By listening to music and trying to revise at the same time, Rashine is trying to use the phonological loop for both activities (1). 	
	 The phonological loop has limited capacity, and so Rashine cannot cope with two auditory tasks simultaneously and is finding it difficult to revise(1). 	
	Look for other reasonable marking points.	

Question Number	Answer	Mark
9(a)	AO1 (4 marks)	(4)
	One mark for each point identified, and one mark for each justification for how it contributes to our understanding.	
	Maximum of two marks if two or more points are made without explanation.	
	 HM had a surgical procedure that resulted in no new memories being stored (1). 	
	 He could recall everything prior to the surgery but could not encode new memories (1). 	
	 This shows us that we have two types of memory: long term and short-term storage, as HM could maintain new information briefly/this shows us that the area damaged relates to new memories being encoded (1). 	
	 It informs us that short-term memories need to be transferred to long-term storage to be able to be retrieved again/it informs us which specific areas of the brain are likely to relate to memory (1). 	
	Look for other reasonable marking points.	

Question	Answer	Mark
Number		
9(b)	AO1 (2 marks) AO3 (2 marks)	(4)
	One mark for each strength/weakness identified (AO1). One mark for justification of that strength/weakness (AO3).	
	For example: Strength	
	 Deliberate damage to the memory system/brains of human participants is not ethical (1), so case studies offer a unique insight into how our memory works whilst avoiding the ethical issue of invasive investigation (1). 	
	Weakness	
	 Case studies are only based on one person or a small group (1). Therefore the resulting memory damage may not be the same for everyone and so makes the findings less generalisable/reliable (1). 	
	Look for other reasonable marking points.	

Question Number	Indicative content	Mark
10	AO1 (4 marks), AO2 (4 marks)	(8)
	AO1	
	 The multi-store model suggests a sensory store, a short-term store and a long-term store. 	
	 The sensory store is the register for all information coming in from the senses but only some is attended to. 	
	 What is attended to goes into short-term memory (STM). 	
	 It lasts up to 30 seconds, and the capacity is between 5 and 9 items. 	
	 If the material is rehearsed in STM, it can go into long- term memory (LTM) otherwise it is lost. 	
	 LTM has unlimited capacity and duration. 	
	 STM is acoustic in coding, and LTM is mainly semantic though includes visual and acoustic elements. 	
	AO2 Details from Mr Williams's problems that can be used in evaluating the Multi-store model:	
	 He has a problem making new LTMs (he can't recall his new grandson or what day of the week it is). 	
	 His STM is intact because he can remember for short periods. 	
	 Transfer from STM to LTM is a problem. 	
	 So he has to keep asking the same question e.g. what day it is. 	
	 He is going to have problems with everyday activities such as cooking because he will not remember he has carried out things such as lighting a gas stove. 	
	 And forgetting to take his medication or taking it more than once because he will not transfer the information from STM to LTM. 	
	 His past episodic LTM is intact (he can recognise his children). But he will not update his family history even to the extent of a member dying or getting married or new members being born. 	
	Look for other reasonable marking points.	

Level Mark Descriptor

AO1 (4 marks), AO2 (4 marks)

Candidates must demonstrate an equal emphasis between knowledge and understanding vs application in their answer.

Level 0	0	No rewardable material
Level 1	1–2 marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 2	3–4 marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Discussion is partially developed, but is imbalanced or superficial occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 3	5–6 marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. Candidates will demonstrate a grasp of competing arguments but discussion may be imbalanced or contain superficial material supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 4	7–8 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical balanced discussion, containing logical chains of reasoning. Demonstrates a thorough awareness of competing arguments supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). (AO2)

Question Number	Indicative content		
11	AO1 (6 marks), AO3 (6 marks) AO1		
	 Lab experiments are studies done in an artificial and controlled environment. 		
	 One example is Baddeley (1966b) who looked at STM and LTM to study acoustic versus semantic memory and used careful controls such as controlling the lists used in the study. 		
	This gives internal validity.		
	 However, an unnatural setting threatens ecological validity. 		
	Ethically experiments have to be careful about stressing participants.		
	 Sherif et al. (1954/1961) used a field experiment which had a natural setting for the boys. 		
	 Reicher and Haslam (2006) aimed for a natural setting as they set up a mock prison. 		
	 Milgram (and Burger, 2009) carried out a series of experiments in a laboratory. 		
	 Questionnaires use written questions which can be standardised in giving each participant the same set of questions. 		
	 Cohrs et al. (2012) used questionnaires to gather data about prejudice related to social dominance orientation and right wing authoritarianism. 		
	Questions can be closed or open.		
	 Ecological validity of this data means that they are 'real life'. 		
	 Ethically, questionnaires must consider the questions that are asked, and this can embarrass participants if they refuse to answer them or perhaps if they answer them. 		
	AO3 For the use of laboratory experiments:		
	 Laboratory experiments generally ensure high levels of experimental/internal validity to establish cause and effect. 		
	The use of questionnaires has little control over extraneous variables so cannot assess cause and effect in that respect.		

Question Number	Indicative content	
11 cont.	 Using procedures such as rehearsal suppression ensures that only STM is being tested, a control of Baddeley (1966b). 	
	 The use of questionnaires can't enforce prescribed procedures. 	
	 Field research often draws the same conclusions as laboratory research, suggesting that they are equally valid such as Sherif's findings about in group and out group prejudice, compared with Tajfel's own work in the laboratory. 	
	 Questionnaires about prejudice focus on self-report data, which might not be valid - though Cohrs et al. (2012) found that peer-report data correlated with self-report data, which suggests self-report data is reliable (presumably also valid as it comes from the individual concerned). 	
	 Social laboratory research is able to isolate human social behaviour, such as obedience to authority, without other numerous social behaviours influencing behavioural responses, which can help to study parts of the behaviour. However, this can mean the whole is missed, which points to lack of validity. 	
	 Questionnaires can assess behaviour based on a variety of questions that cover a range of social behaviours, and this is likely to mean more validity as real life covers a range of social behaviours. 	
	Against the use of laboratory experiments:	
	 Laboratory research may lack ecological validity due to the controlled conditions, though obedience can happen in controlled conditions which means experiments looking at obedience might have some validity. 	
	 Questionnaires are carried out in natural situations so have increased ecological validity though they are asking what people say rather than recording actual real behaviour, and social desirability/demand characteristics can affect self-report data and its validity. 	
	 Learning lists of words is not a realistic task and does not reflect everyday use of memory (Baddeley, 1966b and other studies). 	
	 Questionnaires can be asked about memory in everyday life, so they are more realistic. 	

Question Number	Indicative content	Mark
11 cont.	 Field research in cognitive psychology highlights that laboratory research may often underestimate the capacity of human memory (such as work by Loftus and others when they set up a situation and asked about eye witness testimony). 	
	 Laboratory research tends to use homogenous groups of people, so the external validity is low, and the application to the wider population cannot be established. 	
	 Questionnaires are more likely to use natural populations so application to wider populations if they are applicable. 	
	 Laboratory-based research into social psychological topics does not reflect normal everyday behaviour such as obedience in a classroom or to a police officer so lacks validity/lab-based research into social psychology does reflect normal behaviour in that it reconstructs a situation where someone is obeying authority and an unnatural setting can suit this scenario in some situations. 	
	Look for other reasonable marking points.	

Level	Mark	Descriptor				
	AO1 (6 marks), AO3 (6 marks)					
Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.						
Level 0	0	No rewardable material.				
Level 1	1–3 marks	Demonstrates isolated elements of knowledge and understanding. (AO1)				
		A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)				
Level 2	4–6 marks	Demonstrates mostly accurate knowledge and understanding. (AO1)				
		Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)				
Level 3	7–9 marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. Leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)				
Level 4	10–12 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)				