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Chapter 1

Introduction

Shared intention and shared cooperation are common among rational agents. They play football together, build houses together, construct roads together, organise and engage in wars together, plan conferences together and the list goes on. Among these listed activities, two things are predominant; they share the intention to succeed, that is, to achieve their goal and this shared intention influences their cooperation. But how does shared intention work? What does shared intention mean? When two friends by chance travel to the same destination to attend to different programmes, coincidentally board the same flight, sit next to each other and chat on board, is this a shared intention? When two strangers intentionally travel to the same destination to attend to the same workshop, board the same flight, sit next to each other and chat on board, is this a shared intention? Which of these two is a shared intention and why?

These two mentioned cases are relatively similar but there is a great difference. There is a body contact in both cases, but is the body contact one of the determining factors of a shared intention? No, it is not body contact. Sometimes there may not be body contact but yet there is a shared intention, like when two strangers get to each other through the social media, discover their interests and agree to jointly present a paper at an international conference in the University of Vienna. Yes, there is a shared intention here even before meeting. What defines a shared intention is in the head, a mental attitude. This is a shared intention, a mental disposition to intend with another agent(s) towards something and to cooperate correspondingly.

And so what type of mental attitude differentiates shared intention from ordinary contact or discussion? Let me analyse the above mentioned cases. The first case is about two friends travelling to the same destination and

met each other by coincidence. Although they are friends, there was no shared intention either to travel to the same destination or to board the same flight. All that happened were mere coincidences. The second case is about two strangers intentionally travelling to the same destination to attend the same workshop. Each of them intended to attend the workshop, and to that effect booked the same flight and boarded it. So they shared the intention to attend the same workshop, to board the same flight and to sit next to each other. This is a shared intention here.

Therefore, in his book, 'Shared Agency: A Planning Theory of Acting Together,' Michael Bratman gives an exhaustive presentation of his understanding of the shared agency. He proposes a constructivist account of shared intention that is construed in terms of individual intentions and attitudes of the participants and their interrelations. He maintains that a shared intention must be unequivocally differentiated from other types of social interactions which are socially interconnecting but do not have a shared intention.

He centres his argument on his shared agency on what he calls the planning theory of modest sociality which he describes as a small-scale stable group of agents acting together with no hierarchical relationship among the participating agents. In this argument, he builds his intention condition theory on 'I intend that we J' and 'you intend that we J' in which the 'we' is shared intentionally among the participants so there are interlocking and reflexivity.

This work is notably an extension of his individual planning agency, 'Intention, Plans and Practical Reason.' That is why he calls it a continuity thesis from individual planning agency to a shared agency.

In this thesis, I introduce my work in chapter one and summarise Bratman's argument on Shared Agency: A Planning Theory of Acting Together in chapter two. Then in chapter three, I discuss three major objections to his argument: the problem of circularity, the problem of the possibility of common knowledge among the participants in shared intention and that children and animals cooperate successfully even though they lack robust

theory of mind required by Bratman's argument. Chapters four and five are evaluation and conclusion.

Chapter 2

The Shared Agency: A Planning Theory of Acting Together

Michael Bratman, in his book, 'Shared Agency: A Planning Theory of Acting Together,' gives an exhaustive presentation of his understanding of shared agency. He proposes a constructivist account of shared intention that is construed in terms of individual intentions and attitudes of the participants and their interrelations. He maintains that a shared intention must be unequivocally differentiated from other types of social interactions which are socially interconnecting but do not have a shared intention such as audience who meet one another on their way to a concert hall, clapping hands spontaneously and in unison at the end of a wonderful performance, spontaneous help to the victims of accident, etc.

He uses interpersonal pattern of ordinary intentions and other individual attitudes. This means that the individual agents are the source of the intention and not any group agent. This makes it obvious that there is a relationship between the individual planning agency and shared agency.

According to him, the shared intention should be understood as "a state of affairs consisting primarily of appropriate attitudes of each individual participant and their interrelations."¹ So he argues for a theory of shared intention that is based on individual attitudes and relations between them.

This means that shared intentional activities are different from ordinary activities that are not intentionally shared. He focuses his argument on his approach to shared intention on non-asymmetric small-scale activities with only a small group of participants. He gives examples to illustrate what he means by the non-asymmetric small-scale activities such as painting a house together, singing a duet together, taking a trip to New York together. The distinctive character of Bratman's shared intention is, "I intend that we J." And so the relevant intentions refer to a "we" that is shared intentionally. He establishes his argument on the sufficient conditions for

shared intentions in the following ways which he describes as eight interrelated building blocks for the construction:

- (i) we each intend that we go to NYC.
- (ii) we each intend the following: that we go to NYC by way of the intentions of each that we go to NYC (and that the route from these intentions to our joint activity satisfies the connection condition).
- (iii) we each intend the following: that we go to NYC by way of sub-plans of each of our intentions in favor of going to NYC that mesh with each other.
- (iv) we each believe the following: if each of us continues to intend that we go to NYC, then we will go to NYC by way of those intentions (and in accordance with the connection condition).
- (v) we each believe that our intentions in (i) are persistence interdependent.
- (vi) our intentions in (i) are persistence interdependent
- (vii) common knowledge among us of conditions (i)-(vii).
- (viii) public mutual responsiveness in sub-intention and action, mutual responsiveness that tracks the end, intended by each, that we go to NYC by way of the intentions of each that we go. We have understood the connection condition in terms of (viii). And we can now read this understanding of the connection condition back into the contents of the attitudes cited in (ii) and (iv). These resources in hand, let's try to formulate a general, conservative construction of modest sociality.²

Bratman compressed his argument in the following sufficient conditions for shared intention to J:

A. Intention condition: We each have intentions that we j; and we each intend that we j by way of each of our intentions that we] (so there is interlocking and reflexivity) and by way of relevant mutual responsiveness in sub-plan and action, and so by way of sub-plans that mesh.

B. Belief condition: We each believe that if the intentions of each in favor of our J-ing persist, we will] by way of those intentions and relevant mutual responsiveness in sub-plan and action; and we each believe that there is interdependence in persistence of those intentions of each in favor of our j-ing.

C. Interdependence condition: There is interdependence in persistence of the intentions of each in favor of our J-ing.

D. Common knowledge condition: It is common knowledge that A-D.

And we can then go on to say that what is needed for shared intentional activity, and so for modest sociality, is that this shared intention to J lead to our j-ing in accordance with the following connection condition:

E. Mutual responsiveness condition: our shared intention to] leads to our j-ing by way of public mutual responsiveness in sub-intention and action that tracks the end intended by each of the joint activity by way of the intentions of each in favor of that joint activity.

And E specifies what counts, in A and B, as relevant mutual responsiveness. The compressed basic thesis is the claim that conditions A-E provide sufficient conditions for shared intention and modest sociality.³

However, Bratman is not alone in this view. There are some other people who share similar views although with different approaches such as John Searle, Margaret Gilbert and Raimo Tuomela. Let me quickly summarize their approaches. John Searle bases his theory on irreducible “we-

intention.” According to him, the “we-intention” is a mental state which an individual possesses of a collective intention and this collective intention is always irreducibly collective. This means that individuals who participate in a “we-intention” do not add to the collective intention instead they derive their individual intentions from the collective intention. This means that a single individual could have a we-intention even without referring to any other individual.⁴

Margaret Gilbert built her theory on joint commitment. According to her, joint commitment is always holistic and cannot be reduced to individual attitudes. A joint commitment is formed when a group of individuals openly expresses their willingness to be jointly committed as a body. In order to illustrate her argument clearly, she makes use of a body to designate that a part cannot be separated from the whole; an individual cannot be separated from the group once the group is formed. Furthermore, Gilbert makes use of “a plural subject” to address the individual members to a joint commitment. And a joint commitment, therefore, implies an obligation to uphold the required collective attitude. So each member has a right to reproach anyone who fails to do her part.

Raimo Tuomela’s joint intentions comprise sets of “we-intentions.” By this, he means the participatory intentions which are held by the members of a group. According to him, he describes we-intention as an intention in which a group of individuals has both a dependent intention and a dependent belief. The individuals here have the intention that is dependent on the participation of others in a joint action and a corresponding belief that they will participate. This shows that each individual intends to participate because of the belief that others will participate. Therefore, the we-intention involves an irreducible collective commitment.

However, Bratman centres his argument on his theory of action on the shared agency on what he calls the planning theory of modest sociality. The modest sociality is a small-scale, stable group of agents acting together in which there are no hierarchical authority relationships among the participants. The modest sociality are;

Cases of small scale shared intentional agency in the absence of asymmetric authority relations. Examples include: our singing a duet together, but not the activities of an orchestra with a conductor; our going to NYC together, or . . . our walking together, but not a school trip led by a teacher; our having a conversation together, but not an exchange in which a language teacher guides a novice.⁵

Most of the terms and ideas he discussed in this book, "Shared Agency," are related to the topics he treated in his individual agency, "Intention, Planning and Practical Reason." Bratman argues that in shared intention, the agents play roles in their shared activity J that is analogous to the role that an individual agent plays in her individual activity.

According to Bratman, several agents' shared intention plays a role in their shared activity J that is analogous to the role that a single agent's intention plays in her individual activity. It coordinates the participants' planning and acting in pursuit of their J-ing, and it structures their deliberation and bargaining concerning how to J.⁶

Shared intention coordinates the planning and attitudes of the participants in the pursuit of their intentional activities. This is practicable because Bratman builds his shared intention theory on a simple interpersonal pattern of ordinary intentions and other individual attitudes. The foundation is on the intentions of the individual familiar persons that form a shared intention. There are no extraordinary building blocks. This means that there is no need to posit a group agent or an intention that literally belongs to the group independently without reference to individual intentions that build them up. So it is obvious that there is a relationship between the individual agency and shared agency.

We begin with an underlying model of individual planning agency, one that I have called the planning theory. And my guiding conjecture is that such individual planning agency brings with it sufficiently rich structures – conceptual, metaphysical, and normative – that the further step to basic forms of sociality, while significant and demanding, need not involve fundamentally new elements. There is here a deep continuity between individual and social agency.⁷

So a good understanding of his planning theory of individual agency is very important to understanding the planning theory of modest sociality. He argues that his individual planning agency theory provides all the conceptual, metaphysical and normative materials one needs in order to construct the modest sociality. And because of this argument, he defends his continuity thesis. The continuity thesis means the application of the principles he developed in the individual planning agency in the shared agency in which he sets up the continuity of the conceptual, metaphysical and normative structures of modest sociality with the structures of the individual planning agency. According to him, “(m)y conjecture is that the conceptual, metaphysical and normative structures central to such modest sociality are in a sense I aim to explain continuous with structures of the individual planning agency. This is the continuity thesis.”⁸ This means that the shared agency is an extension of and some additions to the individual intentional agency. That is why he said further;

Once God created individual planning agents and placed those agents in a world in which they have relevant knowledge of each other's minds, nothing fundamentally new conceptually, metaphysically, or normatively needs to be added for there to be modest sociality. This is because the further steps from individual planning agents who know about each other's minds, to modest sociality, while substantive and demanding steps, are

nevertheless primarily applications of the conceptual, metaphysical, and normative resources already available within our theory of individual planning agency. The deep structure of at least a central form of modest sociality is constituted by elements that are continuous with those at work in the planning theory of our individual agency. So the problem of how our modest sociality is located in the natural world is primarily the problem of how our individual planning agency, in a context of knowledge of the minds of others, is located in the natural world.⁹

This continuity thesis contributes immensely to Bratman's theory of shared agency. Bratman uses it to form his theory of shared agency which is dependent mostly on his theory of individual agency, that is, his planning theory of agency. To that effect, his continuity thesis means that no new conceptual, metaphysical or normative building blocks have to be introduced in order to explain what distinguishes shared intention from social interactions since the shared intention theory is more of the second part of individual planning theory. Bratman's approach and development of his shared intention theory are very unique among other joint intention theories of his colleagues. He argues that his theory of shared agency has a reductive capacity. This means that it can reduce Searle's "we-intention" or Gilbert's "joint-commitment" by providing reductive sufficient conditions for joint-ness and sharedness.

The basic thesis aims at providing reductive sufficient conditions for the joint-ness or shared-ness at work in modest sociality, sufficient conditions that are continuous with the resources provided by the planning theory of individual agency. These purported sufficient conditions involve a complex web of conditions, including intentions concerning the joint activity, interlocking intentions, interdependence of intentions, and

intended and actual mutual responsiveness and mesh. This reductive but multifaceted model of joint-ness and shared agency contrasts with Gilbert's nonreductive, single-faceted model.¹⁰

Furthermore, he adds;

The reductive, multifaceted model of joint-ness and shared agency provided by the basic thesis contrasts with Searle's single-faceted, nonreductive appeal to we-intention. The basic thesis grounds the norms of social rationality that are central to modest sociality in norms of individual intention rationality.¹¹

His reductive approach links his shared intention theory with his individual planning theory. This is because the shared intention is treated as a complex phenomenon which consists of the individual planning agency. This complex phenomenon that builds up the shared intention can be analysed simply by identifying the simple elements from the individual planning agency. So Bratman's approach explains how the shared agency and the individual planning agency hang together. It is noteworthy however that this reductive analysis may be restricted to the practical aspect of shared intention while the theoretical such as individual beliefs, knowledge or intention may not be reducible. This is to ensure that the shared intention is neutral with regard to shared intentional activity. Through this approach in reductive analysis, the individual identity is interdependent in a shared intentional activity. The reason being that the shared intention is framed from the attributes of individual minds which stand from an I-mode character – I intend that we J.

Bratman devotes a great portion of his book to explain his reductive account. He presents his account as an answer to the following question:

Suppose you and I are painting a house together. What makes this a shared intentional activity? We could imagine a contrast case in what we each intentionally go through the same motions as we do when we paint the house together, and yet there is no shared intentional activity. Perhaps we are each and every one of us on our individual painting project. Echoing Wittgenstein's question about the difference, in the individual case, between my arm's rising and my raising it, we can ask: what is the difference between such a contrast case and shared intentional activity? In the case of individual human action, we can see the difference as an explanatory role of relevant intentions of the individual agent. I propose an analogous view of the shared case: the difference in the case of shared agency. Our painting together is a shared intentional activity, roughly, when we paint together because we share in intention so to act.¹²

Then on the question Wittgenstein asks; "(w)hat is left over if I subtract the fact that my arm goes up from the fact that I raise my arm?"¹³ Two actions are involved here, this first action is 'my arm goes up' and the second action is 'I raise my arm.' The first action, 'my arm goes up,' is not intentional. Then the second action, I raise my arm intentionally. This raising of my hand upwards involves two aspects of me. There are the mental aspect and the physical aspect. When it is intentional, the mental aspects directs the physical aspect, causing it to go upwards. And this is an intention-in-action. Let me put in a mathematical structure: my intention + my arm goes upwards = intention-in-action. Then the question is, what shall I add to my raised arm in order to make it an intentional action? Bratman argues that the intention of raising my arm is connected with the movement in such a way that it can explain the movement. Therefore, he argues that his shared intention theory should be understood in the same direction. And he forms the core of his account on what he calls intention condition.

Intention condition: We each have intentions that we J; and we each intend that we J by way of each of our intentions that we J (so there is interlocking and reflexivity) and by way of relevant mutual responsiveness in sub-plan and action, and so by way of sub-plans that mesh.¹⁴

"The proper expression for the individual group member's attitude is 'I intend that we J', where 'we J' refers to a cooperatively neutral description of the joint activity which merely satisfies the "behavioural conditions" for cooperation."¹⁵ This "we" here is individually participative because each participant in the "we" submits to be guided by the shared intention. Therefore, each individual contributes to the "we" so that the "we" becomes a whole. As a result of this, the "we" is participative. That is to say that my state of intending and your state of intending, therefore, form a shared intention. Let us note that there is also another type of "we" that is not participative. This is a concept of a group that does not share intention. For example, when we heard the fire alarm during our seminar, everybody left the building and went outside. The "we" here is plural. We did not intend to interrupt our seminar and we did not share an intention to go out and stay outside the building. We just heard the fire alarm and went out spontaneously, unplanned for security reasons. Therefore, there is no participation. Participation means partnership in shared intention. The shared intention connects the partners (you and me).

There are two occurrences of "we" in (i). The first is what Christian List and Philip Pettit call "the distributed 'we!'" The appeal is to my state of intending and to your state of intending. What about the second occurrence? Well, in basic cases this use of "we" will also be distributed. But we can here also, without circularity, avail ourselves of a concept of a group. We can do this if that concept of a group does not itself bring with it the very idea of shared intentionality. I might intend, say, that those

of us in this part of the park run toward the hot air balloon that has crashed. If this use of "we" (or "us") does not bring with it the very idea of shared intentionality, there need be no circle.¹⁶

Bratman said that there is a shared intention to J if the following conditions are met. J stands as a joint activity.

A. Intention condition: We each have intentions that we j; and we each intend that we j by way of each of our intentions that we j (so there is interlocking and reflexivity) and by way of relevant mutual responsiveness in sub-plan and action, and so by way of sub-plans that mesh.

B. Belief condition: We each believe that if the intentions of each in favor of our J-ing persist, we will j by way of those intentions and relevant mutual responsiveness in sub-plan and action; and we each believe that there is interdependence in persistence of those intentions of each in favor of our j-ing.

C. Interdependence condition: There is interdependence in persistence of the intentions of each in favor of our J-ing.

D. Common knowledge condition: It is common knowledge that A-D.

And we can then go on to say that what is needed for shared intentional activity, and so for modest sociality, is that this shared intention to J lead to our j-ing in accordance with the following connection condition:

E. Mutual responsiveness condition: our shared intention to j leads to our j-ing by way of public mutual responsiveness in sub-intention and action that tracks the end intended by each of the joint activity by way of the intentions of each in favor of that joint activity.

And E specifies what counts, in A and B, as relevant mutual responsiveness.¹⁷

So apart from intention condition, there are other conditions in his shared intention theory which are belief condition, interdependent condition, common knowledge condition and mutual responsiveness condition. When the intention condition and the other conditions are appropriately coordinated and the actions are performed together, then it is a shared intentional activity. Bratman argues that his intention condition and the other conditions are jointly sufficient component for shared intentional activities.

And so, Bratman argues that agents have shared intention to J if their individual intentions in J-ing are correspondingly interrelated (intention condition), have certain beliefs about the efficacy (belief condition) and persistence of the intentions of each in J-ing (interdependence condition), and these agents have these intentions and beliefs is a matter of common knowledge (common knowledge condition). Furthermore, there is mutual responsiveness among the participating agents on how each of their sub-intentions and subplans are interlocking and reflexive. When these conditions are fulfilled, the J-ing is said to have a shared intentional activity and the participating agents treat one another as partners or co-participants. This is because each of the participating agents intends not only that her own intention be carried out but also that the intentions of others are carried out too. The agents cannot rationally also intend to bring about the intended end by way of brute coercion that bypasses the other's agency (say, I cannot intend to handcuff you to the bank's entrance door against your will, in order to delay the police). Since each of us intends our subplans to be co-realizable, we also cannot rationally intend to circumvent the execution of the other's subplan by deception (say, I cannot rationally intend that we rob the bank by my threatening the bank tellers with a handgun if I know that you intend that we rob the bank non-violently, without the use of weapons). Furthermore, if the Intention condition is fulfilled, then each of the agents will to some extent be disposed to help and support the other in doing their bit to bring about the common end if it becomes necessary.¹⁸ Therefore, when the intention condition is met, the

individual intentions interlock. In summary, the individual participating agents have shared intentions with other agents if their intentions and actions are correspondingly interrelated with the intentions and contributory actions of the other agents, and they are aware of this connection.

Michael Bratman gives some explanations to the objections of his colleagues. Three of these objections are; first, the problem of circularity. According to Bratman, "all participating agents should have the intention "I intend that we J." "I intend that we J" not the same as "I intend to contribute to our J-ing." Our J-ing is a collective action which is the sums of individual choices that are contained in a participatory intention.

The second objection is about common knowledge. This is because Bratman argues for common knowledge among the participants to the shared intention. His critics maintain that intention is independent of each agent and so cannot be shared. Each agent can only intend his own actions. Nobody can control the intention of another agent. A can only advise B or suggest to B but only B can decide definitely.

In the third objection, they maintain that children and animals cooperate successfully even though they lack robust theory of mind required for shared agency according to Bratman's theory.

Furthermore, Bratman gives an elaborate explanation of shared agency. He said that "the details of our view of the relationship between shared intentional and shared cooperative activity must await our overall theory, one that will focus primarily on shared intentional activity."¹⁹ He maintains that his shared agency has greater advantage over the collective theory of his colleagues, especially Searle's we-intention.

Bratman argues against the argument presented by Gilbert on mutual obligation and joint commitments in collective intention. He claims that shared intention can exist without mutual obligation and joint commitments. According to him, "I am not convinced such obligations are present in all cases of shared agency."²⁰ However, he believes that all cases do not require obligations and in some cases, obligations come in when it

is explicitly stated by the agents. In explaining further, he said that "shared agency is a generic phenomenon and cases of the shared agency that involve relevant mutual obligations are a special case."²¹

Bratman builds his theory of shared agency on what he called connection condition which he refers to as persistence interdependence. According to him, "(a) we each intend that we J, (b) there is persistence interdependence between the intentions of each in (a), and (c) if we do both intend as in (a), then we will by way of those intentions (and in accordance with the connection condition)."²² He limits his theory on the shared agency to what he calls modest sociality, that is, a stable membership that is made up of small and informal individuals, friends and lovers. He said that "my focus will be primarily on the shared intentional activities of small, adult groups in the absence of asymmetric authority relations within those groups, and in which the individuals who are participants remain constant over time."²³

Bratman argues also that when participants engage in shared intentional activities, they have different personal reasons in the background for engaging in shared intentional activities outside the common reason. Let me illustrate how this is possible with two examples. James and Paul intend to paint their house to look modern and beautiful. So their common shared intention is to make their house look modern and beautiful. However, each of them has another personal intention attached to the shared intention. James has a personal intention to celebrate his fiftieth birthday and Paul has a personal intention to rent part of his apartment to tenants. Perhaps, it is possible that neither of them is aware of the other's personal intention. Another example is a case of Mark and Udo having a shared intention to travel to New York City to attend an international conference on Fake News. Behind this shared intention, Mark has a personal intention to visit his brother who is living there and Udo has also a personal intention to enrich his academic knowledge.

In contrast to Margaret Gilbert's view who maintains that there are joint commitments and mutual obligations in joint intentions, Bratman argues that no mutual obligations are involved in shared intentions.

Bratman argues that there is a need for group agents even though the individualistic nature of his account does not admit the group as a primitive root. According to him, the individuals are the primitive root. However, he admits that they exist. By group agents, he means groups that can act as groups. They are "the relevant underlying structure of interrelated individuals."²⁴ The group agents include also the individuals who act for their group in different capacities for the interest of their groups. These individuals include the leaders of any group or representatives of any group. And these people act, they act in the name and intentional capacity of the group or groups they are representing and not on their individual capacity. So when they act, they are representing the intentions of their groups and not their individual intentions.

Bratman holds that groups are extrinsically intentional agents but not intrinsically intentional agents. This means that a group as an agent lacks the capacity to form intention because they are not intentional agents. However, the individual agents are intentional agents. It is the individual intentions that are classified as group intentions when they are shared together.

Bratman argues that shared deliberation is the basis of a common ground of views and evaluations. Shared deliberation is a stage before the shared intention is formed. This involves considering the detailed requirements for the shared intentional activities such as the overall plans and subplans, the possibility of meshing the subplans together, the means to achieve the shared intention, the affordability of the financial requirements, etc. The shared intention is formed only after the shared deliberation, that is, when there is an agreement among the participants on the procedure to achieve their shared intention. So shared deliberation by the participants is a shared intentional activity which is part of the group's intentional activity. When the participants shared deliberation, they reason together and decide on some common grounds of shared commitments to achieve their goals.

Deliberation before the shared intentional activity is guided by shared intention. Let me illustrate shared deliberation in the cases of James and

Paul and Mark and Udo. During the shared deliberation, James wants the paints to be bought from Bauhaus and Paul is concerned about the price. In this case, the subplans will mesh because it is possible to buy paints at cheap price in the Bauhaus. If James had willed that their house is painted light brown and Paul had argued for light pink during the deliberation, then their subplans will not mesh and consequently, there will be no shared intention. Let present another case. Mark wants them to board a cheap flight to New York City from Vienna and Udo want them to buy a ticket from the Turkish Airline. In this case, there is a meshing of the subplans because it is possible to buy a cheap flight ticket from Turkish Airline. However, if Mark had wanted them to buy their flight ticket from Lufthansa and Udo wanted them to buy it from the Turkish Airline, there would have been no meshing of their subplans. So these and other details are deliberated among the participants before the shared intention is formed.

However, Bratman did not highlight on his shared agency how the shared commitments or intentions are formed or how they lead to concrete intentional actions in the case of individuals, although he discussed these in details on his individual planning agency.

Let us note that in Bratman's account which is an 'I-mode' account is a contrast of a 'we-mode' account. The 'I-mode' account holds that in shared intentional activity, the participants may have different reasons in participating in the shared intention. So the agents in 'I-mode' account are so to say are the foundation and they determine the shared intention. But in a 'we-mode' account, the group is so to say is the foundation and it determines the joint intention. Thus, the I-mode account is a contrast of the we-mode account.

Chapter 3

Three Major Objections to Bratman's Shared Agency

Bratman in his Shared Agency argues for a constructive account of shared intention built on the individual intentions and also on the attitudes of the participating agents and their interdependent relationships. His shared agency highlights the functional roles of each of the participating agents in their shared activities and on the non-asymmetric small-scale activities of a small group which consists of familiar agents. His argument is logical and academical but there are some objections to it arising from circularity, common knowledge and the fact that children and animals cooperate successfully even though they lack a robust theory of mind required by his shared agency for the intending participants. So it is too complex to accommodate the joint action of young children and animals.

3.1. The Problem of Circularity

Bratman establishes his argument on the shared intention, "I intend that we J and you intend that we J." According to him, this shared intention should be understood as "I have an intention that we J" and "you also have an intention that we J." So "you and I intend that we J" is an intention both of us form because of our shared intention and in accordance with our mutual belief, common knowledge, persistent interdependence and mutual responsiveness. He also distinguishes "I intend that we J" from "I intend to contribute to our J-ing." "We J" contains my intention as a shared activity of our shared intention while "I intend to contribute to our J-ing" is the sum of the individual choices in which the content is an irreducible collective intention. In this case, the individual intending to, acts in an extended participatory intention, acting in a collective project.

Thus, the two main factors that distinguish the shared agency of Bratman from his colleagues I mentioned above are mode and content. Bratman builds his argument on 'I-mode.' This 'I-mode' is how an agent thinks and acts in shared activity. That is to say how she expresses her attitude or performs her actions in relation to a group. His colleagues build theirs on 'we-mode.' In the 'we-mode,' an agent thinks and acts as part of a group in a collective action. Furthermore, his colleagues argue for an irreducible we-intention, an irreducible collective. However, Bratman argues that the content of his shared agency may be reducible in behaviour but not in theory.

The shared agency of Bratman is criticized for circularity problem within the framework of its content analysis. It goes this way, if the 'individual-intentions' build up the 'we-intention,' then the 'we-intention' is reducible to 'individual-intentions.' There is a collapse of the 'we-intention' to individual intention.

3.1.1. Christopher Kutz

However, Christopher Kutz argues for a different view of collective action. He argues for a participatory intention. In a participatory intention, the "participants need not intend to achieve [the] collective end. It is sufficient that participants regard themselves as contributing to a collective end."²⁵ He argues for a participatory intention in order to weaken the possibility of circularity. He maintains that collective action is the sum of individual choices that are contained in a participatory intention. Participatory intention means part of a collective project. This participatory intention is distinguished by the group-oriented content so that each individual is contributing his own part in a collective project.

According to Kutz's minimalistic account, a joint action is an intentional joint action if and only if it is the outcome of several

agents' "overlapping participatory intentions", where a participatory intention is an ordinary intention to perform an action which frames it as a contribution to a collective end.²⁶

And so this introduces a participatory intention in collectivity in the content of the intention and not a new kind of we-mode attitude. Therefore, Kutz uses this notion of collectivity to avoid the problem of circularity. According to him, "the notion of a collective end is simply that of an end that is "constituted by or is a causal product of different individuals' acts"²⁷

Bratman responds that each agent performs a unique action in a shared activity and this is his own action. No agent performs the shared activity alone. In a like manner, each agent has a unique appeal to the intention that we J. And when you and I intend that we J, even though each of us has a unique action and a unique appeal that we J, each of us act consistently with the performance of our shared action. This does not mean doing the same action and having the same appeal to the intention that we J. It means rather that we arrive at a compromise. This involves doing what will help both participants to come in. I will do what will help you to come in and you will do what will help me to come in. Through compromise, "you and I each intend that we perform (cooperatively neutral) the joint action."²⁸ This ensures necessary intentions but different kinds of commitment to joint intention. What does he mean by cooperatively neutral in shared intentional actions? He means those actions that may be done cooperatively but need not be. This means that they could be done by a group of some people coming together and forming the intention to do so or could also be done by an individual alone. So there is no necessity that it must be a group intentional action. He gives some examples with singing a duet, painting a house together, walking together, washing dishes together, moving a table together. These are cases that can be done either as a group or as an individual. That is why he calls it cooperatively neutral. He contrasts it with cooperatively loaded. Cooperatively loaded on the other

hand is an action an agent cannot do alone. It must always be a group intentional action. He gives an example with marriage.

Bratman maintains that it is possible to have necessary intentions and yet different kind of commitment to the joint action. He provides the detail of this argument in his meshing subplans and interdependent intentions theory. According to him, each agent in a shared intention has a subplan for the joint activity. These subplans can only mesh when the agents are willing to compromise. Then there will be an agreement on the subplans of both agents in accordance with the joint activity despite the differences in the subplans. He gives two examples, one where subplans do not mesh and another where subplans mesh. According to him;

Suppose you and I each intend that we paint the house together. However, I intend that we paint it red all over, and you intend that we paint it blue all over. We each know this about the other, know that we each know this, and so on. And neither of us is willing to compromise.²⁹

In the above case, there is no meshing of the subplans because neither of us is willing to compromise. Then, let us consider the second case where the subplans mesh.

Suppose I intend that we paint the house with an inexpensive paint, and you intend that we paint it with a paint purchased at Cambridge Hardware. I don't care where we buy the paint, and you don't care about the expense. Still, we could proceed to paint the house with an inexpensive paint from Cambridge Hardware. Our activity could be cooperative despite differences in our subplans.³⁰

This is a case of cooperative activity despite differences in the subplans. The two subplans are different but they can be assimilated into one. You

do not mind where the paint is bought. What matters to you is the price, that it is inexpensive. On my part, I do not mind the price. What is important to me is the place. And so these two subplans can be assimilated into one, that is, buying the paint at Cambridge hardware and yet at cheap price. So here, each agent intends that the group performs the cooperatively neutral joint action as well as in accordance with subplans of the intentions in favour of the joint action.³¹ He emphasises on the necessity for both meshing and commitment to it. Meshing subplans without commitment brings the absence of a cooperative attitude which is a distinctive mark of shared activity and commitment without meshing subplans cannot produce shared activity.

3.1.2. John Searle

John Searle objects to how Bratman develops his shared intention theory as an intention to do one's part in a shared intentional activity. He argues that his own collective intentionality, that is, his 'we-intention' is primitive and as such does not and cannot collapse into individual intentions. According to his argument:

Collective intentional behavior is a primitive phenomenon that cannot be analyzed as just the summation of individual intentional behavior; and collective intentions expressed in the form "we intend to do such-and-such" or "we are doing such-and-such" are also primitive phenomena and cannot be analyzed in terms of individual intentions expressed in the form "I intend to do such-and-such" or "I am doing such-and-such."³²

"The reason that we-intentions cannot be reduced to I-intentions" is that "the notion of a we-intention, of collective intentionality, implies the notion of cooperation."³³ Thus, this is not the same with the shared

intention theory of Bratman built on the individual intentions and as such collapses into individual intention.

So John Searle argues that the intention to perform any action exists first in the mind of the agent who is acting as part of the collective.

We intend that we perform act A; and such an intention can exist in the mind of each individual agent who is acting as part of the collective. In cases like that of the football team each individual will have further intentional content: which in ordinary English he might express in the form I am doing act B as part of our doing act A. For example, I am blocking the defensive end as part of our executing a pass play. We need only to note that all the intentionality needed for collective behavior can be possessed by individual agents even though the intentionality in question makes reference to the collective.³⁴

He believes that each agent possesses all the intentionality needed for collective behaviour and that the intention of each agent who is acting as part of the collective exists dependently on the collective. This means that it derives from the collective, depends on the collective and aims at the collective. Searle argues that even agents who are suffering from illusions still have the capacity to collective intentionality. According to him, as an agent, I could have intentionality, "even if I am suffering a total hallucination, even if I am a brain in a vat."³⁵ According to him, this is possible to "make a purported reference to other members of a collective independently of the question whether or not there actually are such members."³⁶

He argues that each agent involved in a shared collective intentionality is mentally conscious of this collectivity. She does whatever she does because of the collective. She is pushing a car because we are pushing. She is defending our goalpost so that we are not defeated. She is kicking forward to score a goal so that our group will win the cup. So each agent has both

the collective intention as well as the individual intention in her head at the same time.

Suppose Jones and Smith are engaged in a piece of cooperative behavior. Suppose they are preparing a hollandaise sauce. Jones is stirring while Smith slowly pours in the ingredients. They have to coordinate their efforts because if Jones stops stirring or Smith stops pouring, the sauce will be ruined. Each has a form of collective intentionality that he could express as "We are preparing hollandaise sauce." This is a collective intention-in-action and it has the following form: i.a. (this i.a. causes: sauce is mixed).³⁷

So Jones and Smith are preparing the sauce by means of Jones stirring and Smith pouring water. Through the combined efforts of stirring and pouring water, the sauce is prepared. So even though there are two agents, there is only one intention and one action for each agent: the action of Jones stirring the ingredients and the intention of making the sauce and also the action of Smith pouring water and the intention of making the sauce. Therefore, each agent has one action and one intention and the action of each agent is part of the whole which is the intention. The preparation of the Sauce is achieved by means of stirring and pouring water. This means that the individual actions of both stirring and pouring water are part of the collective intention. The intention to stir is part of the intention to mix.

So Searle faults Bratman's argument on the account of weakness in the joint intention. He argues that a joint intention where each agent does her part is too weak to result in shared intentionality. This is because Bratman basis his argument on the intention condition, 'I intend that we J.' He means that each agent acts as a unique individual in the shared activity. The shared activity depends on the individuals and derives its meaning from the individuals. "Searle contrasts this case with one in which each really is cooperating with the others in pursuit of that overall good."³⁸ So he

contrasts it with his own theory in which each agent acts as part of the collective, depends on the collective for her action and derives her meaning from the collective. He expresses the individuality and the weakness of Bratman's theory thus:

Searle appeals to an example in which each of many business people pursues her own profit-making activities while knowing that that is what the others are also doing, and expects that (given the "hidden hand") this will all result in overall human happiness. But no one sees herself as cooperating with the others to achieve that overall good. If this is all that is involved in intending to do one's part in bringing about the overall good, then such an intention to do one's part is too weak to get us to shared intentionality.³⁹

Let me use two events to illustrate the understandings of John Searle on Bratman's Shared Intention and Bratman's position of Shared Intention. (A.) Consider a group of twenty students that register a seminar on Climate Change. Each of them intends to get a good mark at the end. During the seminar sessions, they attend regularly and do their assignments. They are active during the presentations and may assist the presenter to explain his or her topic. But each student at the end writes his or her seminar paper independently and submits it to the professor. They have the goodwill that everybody performs well but there is no mutual obligation to help one another. And the success or failure of each of the participating students is independent of the others. At the end of the semester, their scores range from excellent, very good, good and satisfactory.

(B.) Consider a trapeze performance by a small group of people. They perform from a raised narrow board in the air. The catcher and the flyer swing in the air. The flyer swings from a narrow board holding his hands on a bar and releases his hands from this bar and entrusts himself or herself to his or her catcher who is swinging from a separate bar to catch him or

her successfully. Some of them even somersault three times in the air before their partner catches them. And so it continues. The performance is breath-taking. The height of flying trapeze performance is often between twenty and forty feet.

The event (A.) illustrates the understanding of John Searle on the shared intention of Bratman. According to him 'each of many business people pursues her own profit-making activities while knowing that that is what the others are also doing, and expects that (given the "hidden hand") this will all result in overall human happiness. But no one sees herself as cooperating with the others to achieve that overall good.' So there is no shared-ness of intention among the participating students. Although they attend the same seminar and wish one another success, the success or failure of each is independent of the other students. It does not affect them. The event (B.) illustrates clearly the position of Bratman in the shared agency. This is a small group of flying trapeze performance. They are familiar with one another and do not have a leader so to say. Each of the participants to flying trapeze intends to make their performance successful and so each participant sees the other co-participants as co-agents for their success. This implies that their whole success depends on the successful contributions of each co-participant. That is to say, that they are mutually interdependent on one another. This awareness of their mutual interdependence on one another obliges each of them to help one another to succeed. It is noteworthy that each of the participants may have other personal intentions apart from their common shared intention. Some personal intentions could be to make them popular, some could be for some financial and material benefits, some could be to get some international connections, etc.

So Bratman views Searle's objection as a contrast case in which each agent is really cooperating with the other agents in pursuit of that overall good. Furthermore, Searle supposes that each participant intends to do his part in the shared activity of bringing about the overall good, in the sense of what is needed for a collectively intentional activity. However, he thinks

that if there is an appeal to a collectively intentional activity, there will be then the building of the very idea of cooperation and collective intentionality into the content of each person's intention to do his part. But he concludes that to capture the phenomenon of collective intentionality we need to appeal to an irreducible we-intention.⁴⁰

Bratman affirms the position of Searle that a theory of shared intentionality needs something that is stronger than the first and weaker reading of intending to act with the other. According to him, "I am agreeing with the spirit of the first half of Searle's critique. And in appealing to (i) I am agreeing with Searle that what is needed here will involve some sort of reference to the joint activity."⁴¹ But Bratman objects to Searle's position on the fact that the joint activity must correspondingly involve the very idea of collective intentionality.

Bratman maintains that the co-participants in the shared intentional activity treat one another not just as mere agents but as intentional co-participants in the shared intentional activity. This means that the co-participants have some mutual obligations to one another. This is a mutual obligation of interdependence on one another based on the belief on the interlocked intention.

In shared intention, each participant is committed to treating the other participants not merely as elements of the world that need to be taken into account (and who may, in turn, take into account one's reaction to them), but also as it is natural to say-intentional co-participants in the shared activity.⁴²

3.1.3. Björn Petersson

Björn Petersson argues that the shared intention theory of Michael Bratman gives rise to a circularity challenge. He begins by reiterating a popular claim that "a necessary condition for a collective action (as opposed to a mere

set of intertwined or parallel actions) to take place is that the notion of collective action figures in the content of each participant's attitudes."⁴³ The conceptual analysis here is that for a collective action to exist, there must be a collective intention. This simply means that the collective intention pre-exists the collective action because before a collective action is carried out, there is always collective deliberation, intentional planning and then lastly collective action. So he basis his argument on this conceptual analysis and maintains that it gives rise to a circularity challenge.

The basis of Bratman's account is 'I intend that we J.' That is to say that each of the participants of the shared intention has an intention in the form of 'I intend that we J.' Petersson asks what is the difference between 'I intend that we J' and 'I intend to contribute to J-ing'? One can easily conclude that 'we J' must refer to a collective action, which is a product of shared intention. However, Petersson does not feel satisfied with this illustration. What does it mean for an intention to be shared and for an action to be collective?

According to the initial response of Bratman to the problem of circularity, Bratman resorts to an approach which he describes as to act in cooperatively neutral ways. In this case, the intention of the participants may be cooperative but need not be. So the collective actions for the joint activities must not presuppose shared intention. "There is, for instance, a clear sense in which we can go to New York together or paint the house together without our activity being cooperative"⁴⁴ Bratman holds that the concept of the action is open, whether intentional or not intentional.

Petersson discusses the position of Margaret Gilbert on Bratman's account. According to him, she believes that his account is unclear and therefore objects to his construal "that we J in I intend that we J.' She suspects, though, that he has an individualistic construal in minds."⁴⁵ She cites Bratman's example of painting a house together. For her, it is like a case of two participants where one performs an action and the co-participant performs a complementary action. Her analysis of Bratman's account is that his account is weak. However, when the restriction terms on shared

intention such as interdependence and interlocking subplans which figure in the participant's conception of 'our J-ing' are considered, the objection of Gilbert may not be appropriate.

In terms of the full necessary and sufficient conditions of Bratman's analysis, we have a shared intention to smash the window if and only if (1) (a) I intend that we smash the window and (b) you intend that we smash the window; and (2) I intend that we smash the window in accordance with and because of (1a), (1b), and meshing subplans of (1a) and (1b), and you intend similarly; and (3), (1) and (2) are common knowledge between us.⁴⁶

Petersson reasons with Gilbert that Bratman's first two conditions, that is, that Bratman considers his account against circularity, 'I intend that we smash the window and you intend that we smash the window' is open and weak. There is, in fact, no bond of sharedness. It is only intending, believing, willing the other agent's cooperation which is only likely because there is no bond. On the other hand, the other agent is intending, believing, willing the same from me. So, everything seems to depend much on a prediction from both agents. It is only when there is cooperation that our subplans will mesh and then we will accomplish our target.

There is mutuality and interdependence, in line with Bratman's requirements. Still, I would say, nothing in this picture captures "sharedness" or "collectivity" in any sense distinct from what we can construe in terms of standard individualistic theory of action. What we have is a complex set of individual intentions, beliefs about other people's intentions, and means-ends reasoning.⁴⁷

It could be said here that in Bratman's account, the individual intentions that form the shared intention allows for coincidental actions. And this undermines the link between the shared intentions with shared actions.

In a bid to avoid circularity challenge, Bratman makes his account nebulous. The intention is a motive that distinguishes intentional actions from ordinary actions. Individual intentional actions and shared intentional actions are both aspects of intentional actions. Participants in a shared intention are committed or so to say are tied to their sharedness of intention. So intention explains actions as done on purpose as intentional and unintentional when otherwise. To explain intentional actions, references are made to both the intentions and acts. In intentional actions, intentions are the causes of the actions while the actions are the effects of the intentions.

Petersson comments on the position of Christopher Kutz. Kutz notes that it is difficult to sever intention from cooperatively joint activity in order to avoid circularity challenge. In the same note, it is difficult to remove intention from an individual intentional activity. It is the intentionality that defines the motive.

The proper response to the circularity challenge, according to Kutz, is therefore not "an analysis that tries to show how each instance of collective action is built out of non-collective materials, but rather a genealogical account that shows generally how the capacity to engage in collective action emerges out of capacities explicable without reference to collective concepts."⁴⁸

So Kutz suggests the background knowledge of the collective intentional activity, the capacity of the participating agents, but without reference to collective concepts. However, Kutz views that in order to describe an intention as having an irreducibly collective content, we must avoid references to collective action. When this is avoided, then we overcome the

challenge of circularity. Petersson argues that Kutz's view is more of individualistic presupposition. The capacity to act collectively cannot be the same as the capacity to act individually. The content of the collective action needs an independent characterization. So it does not matter really whether the intention with a nonrecollective content comes before intention with recollective content. Petersson argues that Kutz's strategy constitutes what makes an action collective.

His answer, like Bratman's, seems to be that the action turns collective when the executive intentions of the individuals contributing to it become directed towards a jointly intentional achievement. That answer brings us back to the original circularity challenge, independently of how we think that these executive intentions come into existence.⁴⁹

Bratman suggests a neutral way to shared intention as an approach out of circularity challenge. In this case, there is neutrality with respect to shared intention without neutrality to shared activity. The shared activity does not presuppose shared intention even though it is distinct from parallel activity. So he argues for a shared intention that is neutral, that is, it does not matter whether the participants intend to share intention or not. Nevertheless, there is still a joint activity. Since the shared intention is indifference, there is no reference to 'I intend that we-J intention. According to Petersson;

My complaint was that if we skip that implicit reference, Bratman's theory does not uphold the distinction between a collective action, and a set of individual interdependent actions. The additional conditions about mutual interdependence, and the like, are insufficient for that.⁵⁰

Petersson claims that there can be a collectivity without shared intention as a solution to circularity challenge. He presents Hurley's argument for a collective unity of activity where the agents have the capacity to identify with other agents as a part of a whole in a collective unity of activity. "The ability to attribute mental states to others plays an important role in the development of that capacity, Hurley argues."⁵¹ The agents have causal powers or dispositions through which they perfect their capacities. Thus, they are called causal agents. This is very evident in ant colonies or a swarm of bees. Their pattern of life is based on collectivity and interdependence although without intention. Like ant colonies and a swarm of bees, the human agents can be causal agents basing their operations on collectivity and interdependence and still without sharing intention.

He argues that "we may distinguish between the behavioral disposition of a group of agents, and the set of behavioral dispositions of its members."⁵² According to him, the behavioural disposition of this group is not a uniform identity of every member of the group. That is to say that "we can regard a group of individuals as the unit of the causal agency, in a sense clearly distinct from that in which we view it as a set of causal agents."⁵³ He claims that in a similar sense, a set of individual activity as a collective activity is also regarded as a set of the causal agent. This group is regarded as a causal group because there are some intrinsic features of the group that bind them together which is based on the roles of the participants.

Thus, in order to distinguish collectivity from intention, he claims that there is a piece of empirical evidence which proves that children at the age of two have a capacity to collectivity without intention. And there is another "evidence strongly suggesting that the capacity to assign intentional states (beliefs, desires, intentions) to others as well as to ourselves is developed later in life - usually around four years."⁵⁴ Therefore, it follows that the young children have capacities to collectivity and this capacity to collectivity does not presuppose intention. In the same vein, adults engage in various collectivity without intention such a small group of people engaged in a discussion while walking and a group of people smashing the shop window.

Both are collective activity because they involve a unit of causal agents which do not presuppose shared intention.

As a solution to the circularity challenge, Petersson advocates for a weak notion of collectivity. In this case, the participants cooperate in a causal relation to the group in which they belong. "My claim is that a weak notion of collective activity must figure in the content of the intentions of the parties to a collective action. That claim is nevertheless stronger than Bratman's initial proposal" ⁵⁵ He claims that the weak collectivity is neutral with respect to the causal agency. "My conclusion is that in order to avoid circularity and retain the features that are supposed to make this sort of account attractive, we need a notion of collectivity that does not presuppose intention." ⁵⁶

3.1.4. Tuomela and Miller

In their own objection, Tuomela and Miller show that;

To intend to go to NYC as one's part in the joint trip is not just to expect that the other will be going and, given that, intend to go oneself. Instead, Tuomela and Miller seek something roughly along the lines of the second understanding I have noted such an intention to act with the other. And Tuomela argues that pace Searle, we can get this second understanding without an unacceptable circularity. ⁵⁷

In response, Bratman suggests to Tuomela and Miller a way forward to getting an involving and stronger reading of intending to do one's part in the shared action. According to him, "we best proceed here by appealing to an intention that we J (where, as I discuss below, can be neutral with respect to shared intentionality), and then understanding such intentions in terms of the planning theory." ⁵⁸ Shared intentional activity is an activity that corresponds to the shared intention of the agents.

Bratman resorts to his theory of individual agency which is his primitive root to make his position clearer. He says that in individual agency, there is a connection between the intentions of individuals and his corresponding intentional actions and behaviours.

I am assuming that the concept of our activity at work in the contents of relevant intentions in basic cases of modest sociality (a) is neutral with respect to shared intentionality, and (b) can be articulated using the conceptual resources of the planning theory of individual intentional agency. What is crucial in response to the issue of circularity is (a). And there may be theoretical purposes for which we need concepts of our activity that satisfy (a) but need not satisfy (b).⁵⁹

Bratman maintains that this involves a disposition of the participants to track and adjust appropriately both in thoughts and actions in such a way that corresponds to the shared intention. He gives some examples with a shared intention of some people preparing to get married and to dance the tango.

3.2. The Problem of Common Knowledge

Bratman argues for a common knowledge as one of the sufficient conditions among the participants to shared intention. He says that there is mutual knowledge of the others' intentions and the knowledge of the others' knowledge. "I know that you know and you know that I know that you know."⁶⁰ Therefore, it is "common knowledge amongst us that p if we each know that p, and both p and the fact that we each know it is out in the open amongst us."⁶¹ However, many theorists argue that children from the age of four can demonstrate spontaneous response. This shows that they have common knowledge but they lack the conditions Bratman listed.

However, Bratman claims that his argument aims at sufficient and not necessary conditions.

Constructivism aims at sufficient conditions for shared intention. It allows for the possibility that there are multiple constructions, each of which provides some such basis for the social roles and norms characteristic of shared intention. . . . though the best thing to say, in the end, maybe that shared intention is to multiply realizable⁶²

“On this latter approach, the cited web of interlocking intentions really is one important kind of shared intention – though there might be other kinds.”⁶³

3.2.1. Deborah Tollefsen

Deborah Tollefsen in her work, “Let’s Pretend! Children and Joint Action,” criticises Michael Bratman’s common knowledge theory on shared intention. She argues that Bratman’s shared intention theory is too complex for children to participate because the children under the age of four lack the robust theory of mind. They lack an understanding of others’ beliefs. She says that this can be demonstrated by using different false-belief tasks such as change-in-location, unexpected-content and appearance-reality tasks.⁶⁴ Therefore, she maintains that the common knowledge theory is not for all since the young children lack a robust theory of mind which is necessary for Bratman’s shared agency. She says that from one year upwards, the children begin to engage in cooperative behaviour such as building towers, making puzzles with others, playing round-about-the-rosy, looking at a book together, engaging in conversation and so on.

Building towers is just one case of social interaction. There are many more. Children at this age make puzzles with others, play

ring-around-the-rosy, look at books together, have conversations (those that have linguistic capacities), and engage in a variety of other simple games and tasks.⁶⁵

She uses Anya who is eighteen months old to illustrate that the children have the capacity for cooperative behaviours. She believes that healthy children as from 9 months can interact with one another and with other people. They can also explore their environment. She says that at "12 months or so that young infants begin to exhibit strong signs of social behaviour."⁶⁶ From 12 months, there is progress in social behaviour and cooperative behaviour. She uses Anya's interest in building with others to demonstrate this cooperative behaviour.

Anya is particularly interested in building towers with others. She begins by placing a block on the floor and encourages me to place one of my choosing on top. She then adds another and so on. She delays her stacking in accordance with my stacking and will often encourage me to finish my part of the tower if I turn for a moment to attend to something else.⁶⁷

So Anya is conscious of her partner's participatory role and prompts her accordingly to re-engage her when she has not yet played her role. She even produces some communicative gesture such as grabbing the hand of her partner and drawing it to the apparatus. The capacity of young children to engage in joint cooperative behaviour increases as they get older. She maintains that these children engage in this cooperative behaviour on their own initiative and not just mimicking the action of adults or simply put, imitating others. The "children are coordinating their own behaviour in a way as to encourage and facilitate the actions of others."⁶⁸ She gives an example with joint pretence. She describes how Anya serves pretend tea very well to her friends. She notes also that in joint pretence, the children cooperate both at the real level and fictional level which involves creativity.

Therefore, she uses tea party cooperative behaviour of children which involves their creative ingenuity to prove that they are capable of joint intentional action. According to her "if the joint intentional actions of adults presuppose shared intentions, one would assume that the joint intentional actions of children (or children and adults) must involve shared intentions as well."⁶⁹ Since she claims that she proves that the joint intentional action of children involves shared intention, she asks "can young children meet the conditions necessary for shared intention according to Bratman's analysis?"⁷⁰ Bratman's theory of common knowledge presupposes co-participants mutual knowledge of one another's belief, desire, intention and thought. She observes the difficulties Bratman's common knowledge theory poses for young children. She says that "Bratman's analysis requires that each participant be aware of the other's intention. They must be mutually responsive to the intention of those engaged in the joint action. This is clearly stated in the second condition in his analysis. The participants to a joint action must form their own intentions in accordance with and because of the intentions of their co-participants."⁷¹

She remarks that this is beyond the capacity of the mind of young children because they lack a robust theory of mind. This means therefore that the young children are excluded from Bratman's shared intention theory since it is too complex to accommodate their joint action. Hence, young children including Anya have the capacity for joint behaviour but lack Bratman's theory of mind for shared intention. "Joint attention and the other social cognitive capacities exhibited by children between the ages of 12 and 18 months provide strong evidence that young children have the capacity to recognise the teleological nature of certain actions."⁷²

She claims that young children even though they lack robust mind can recognise the intention of an agent through his action by using perhaps social reference. They read the actions of the agent and interpret the conditions that the action is directed towards achieving a particular goal. "If children can recognise intentions-in-actions without a robust theory of mind, then we have resolved the mutual responsiveness problem."⁷³ Thus,

this is the criticism of Deborah Tollefsen on Bratman's analysis that there must exist mutual responsiveness among the participants of the shared intention. However, she noted that the children can read the intention-in-action but lack the capacity to understand prior intentions.

After establishing that the children have the capacity for joint behaviour and intention-in-action, she suggests the following revision of Bratman's account of shared intention as a solution to the complexity of his argument.

1. (a) I intend that we J and (b) you intend that we J
2. I intend that we J in accordance with and because of 1a and 1b, and meshing subplans of 1a and 1b; you intend the same.
3. 1 and 2 are jointly perceived (or as Peacocke puts it, 1 and 2 are mutual open-ended perceptually available).⁷⁴

Her first premise, "1. (a) I intend that we J and (b) you intend that we J." This premise is simple for the children. This is because they have the capacity to interpret intentions-in-action. The second premise, "I intend that we J in accordance with and because of 1a and 1b; you intend the same," is also simple for the children because they have the capacity to understand the intention-in-action of their co-participant. According to her,

The content of this intention-in-action will have to be something like "that we J." Having identified the intention-in-action, children can act in accordance with and because of this intention, and as the activity continues, they are able to track additional intentions-in-action that may be exhibited in the form of subplans.⁷⁵

She believes that these intentions-in-action can be manifested in various ways that are perceptually overt and comprehensible to the children such as smiling or frowning face, nodding or necking the head, etc. And the children understand these expressions easily especially when they are

dealing with familiar co-participants and secondly since they have the capacity to track intentions-in-action. Thus, this is how Tollefsen presents her revised account of Bratman's shared intention theory.

3.2.2. Henry M. Wellman, David Cross and Julianne Watson

Henry M. Wellman, David Cross and Julianne Watson write in their work, "Meta-Analysis of Theory-of-Mind Development: The Truth About False Belief," some researches that have been carried out on children's understanding of belief especially with regard to the presentational state of affairs and the representational state of affairs. In the theory of mind with regard to the false-belief understanding among children, the major concern is the mental state of children in relation to mind and world, between false belief and real belief. False belief contradicts reality and the evidence proves them false. One of the false-belief tests is a change of location. A good example of false-belief experiment on a child is that of Wimmer and Perner on Maxi.

Maxi puts his chocolate in the kitchen cupboard and leaves the room to play. While he is away (and cannot see) his mother moves the chocolate from the cupboard to a drawer. Maxi returns. Where will he look for his chocolate, in the drawer or in the cupboard? Four- and 5-year-olds often pass such tasks, judging that Maxi will search in the cupboard although the chocolate really is in the drawer. These correct answers provide evidence that the child knows that Maxi's actions depend on his beliefs rather than simply the real situation itself because belief and reality diverge. Many younger children, typically 3-year olds, fail such tasks. Instead of answering randomly, younger children often make a specific false-belief error-they assert that

Maxi will look for the chocolate in the drawer to which it was moved.⁷⁶

This investigation on false-belief test on Maxi through the change of location gives almost the same result when the children are from four years and above but a different result when the children are less than four years. Thus, the experiment shows "that children's theory of mind undergoes a major conceptual change in early life."⁷⁷ So it shows a developmental progress that the young children undergo in their early life with regard to their robust theory of mind. The analysis from this experiment shows that the representational capacity of the young children in their early years before the age of four is low but they develop this representational capacity as they grow up from four years of age.

Let me present a focal false-belief question. "The focal false-belief question has been asked in terms of action (where will Maxi look for his chocolate), in terms of thoughts (where does Maxi think his chocolate is), and in terms of speech (where will Maxi say his chocolate is)."⁷⁸ It can also be said that this is a representational-based understanding of the mind. There is a right representation when the notion and the contents of the world are the same and there is a false representation when the notion and the contents of the world are quite different.

Therefore, the first stage of the young children is presentational. This is the stage of desire and wanting and the advanced stage is representational. This is the stage of belief and thinking. The young children who lack the robust theory of mind live at the presentational while the older children have the capacity for both the presentational and representational world. Since the children under the age of four lack a robust theory of mind, Bratman's account of shared intention is too complex to accommodate them. This means that common knowledge is not common to all the agents.

3.3. Children and Animals lack Robust Theory of Mind but cooperate successfully

3.3.1. Stephen Butterfill

With regard to Michael Bratman's theory of shared intention, Stephen Butterfill says that "engaging in joint action involves sharing intentions and sharing intentions requires much of the understanding of minds whose development is supposed to be explained by appeal to joint action."⁷⁹ Butterfill believes that the aim of Bratman's account is to explain the early development of human minds. Then he asks whether Bratman's account achieves this aim of explaining the early development of human minds which Bratman argues for and defends. According to Bratman, "I argued, in particular, that our shared intention to J plays three interrelated roles: It supports coordination of our intentional activities in the pursuit of its J, it supports associated coordination of our planning, and it structures relevant bargaining."⁸⁰ Therefore, he centres his objection to Bratman's argument on functional roles. These are the functional roles that shared intention supposed to play. Let me list his arguments in three points:

3.3.1.1. Joint action fosters an understanding of minds

3.3.1.2. Joint action helps to coordinate our planning

3.3.1.3. Joint action structures relevant bargaining

3.3.1.1 Joint Action Fosters on Understanding of Minds

Butterfill supports the claim that joint action is often used to demonstrate the early development of an understanding of human minds. The human social intelligence hypothesis claims that "the unique aspects of human cognition ... were driven by, or even constituted by, social cooperation."⁸¹ And to prove his reason for his support, he says that it is commonly believed "that human adults' reflections on thoughts and actions, their own and others', involve a range of commonsense psychological concepts including belief, desire, intention, knowledge and perception."⁸² However, as the

children grow up, they develop these abilities to psychological concepts like adults and begin to employ them both in fluency and sophistication. Many psychologists believe that the children begin to engage in joint action when they are one year old and this engagement facilitates their early developments. "The motivations and skills for participating in this kind of "we" intentionality are woven into the earliest stages of human ontogeny and underlie young children's developing ability to participate in the collectivity that is human cognition"⁸³ Butterfill believes this claim of the psychologists about children "that engaging in joint actions . . . plays some role in the early development of abilities to use concepts like belief, desire, intention, knowledge and perception, and in the development of higher forms of cognition more generally."⁸⁴

Based on the preceding argument that joint action explains the early development of an understanding of the human minds, Butterfill finds fault in the account of Bratman and maintains that "joint action requires sharing intentions, and sharing intentions requires abilities to engage in reasoning about propositional attitudes — reasoning of just the sort whose development was supposed to be explained by engaging in joint action."⁸⁵

3.3.1.2. All Joint Action involves Shared Intention

Butterfill asks, what is Bratman's joint action? It is a shared intentional activity. Then what is shared intention? Bratman's description contains both a substantial theory of shared intention and a specification which the functional role plays. These are to coordinate activities, to coordinate planning and to provide a framework to structure bargaining.⁸⁶

Butterfill illustrates the explanation of Bratman as a background to his objection. When agents share an intention to paint a house, this shared intention will influence their decision on how to paint the house; the colour, the quality, the estimated price and so on. Furthermore, this shared intention also requires that they coordinate their plans by each of them

bringing the details of his plans and meshing them together and coordinating their activities by way of mapping them out accordingly. It is based on these three functional roles that Bratman argues for the three collective sufficient conditions which form the basic account of his shared intention theory.

1. (a) I intend that we J and (b) you intend that we J
2. I intend that we J in accordance with and because of Ia, Ib, and meshing subplans of Ia and Ib; you intend that we J in accordance with and because of Ia, Ib, and meshing subplans of Ia and Ib
3. 1 and 2 are common knowledge between us⁸⁷

However, Carpenter affirms Bratman's discussion on joint action in infancy. "I will ... adopt Bratman's influential formulation of joint action . . . [F]or an activity to be considered shared or joint each partner needs to intend to perform the joint action together "in accordance with and because of meshing subplans"⁸⁸ In Bratman's account, shared intention and shared intentional activity are interconnected because "each agent does not just intend that the group perform the joint action. Rather, each agent intends as well that the group perform this joint action in accordance with subplans (of the intentions in favor of the joint action) that mesh."⁸⁹ It is therefore, obvious that because of this interconnection between shared intention and shared intentional activity, that Butterfill says there is "a potential objection to the view that shared intentional activity explains early developments in children's ability to think about minds."⁹⁰ The children who are under the age of three subsequently cannot form intentions about others' intentions because "there are several other things that four-year-olds can do that three-year-olds can't. At four, children can distinguish appearance from reality and are able to reflect on having changed their own minds."⁹¹

This ability of four-year-olds is seen as a sea change in children's conceptual development, quite distinct from what they were doing before. Hence, the watershed age of four for Perner as well as Astington and Gopnik is based on a watershed change in four-year-olds' cognitive growth.⁹²

It is very obvious that young children cannot meet the sufficient conditions Bratman formulates for sharing intentions based on the fact that he builds his account of shared intention on sophisticated minds. That means that it suits only the minds that have the capacity for common knowledge which is required for shared intention. Therefore, "meeting the sufficient conditions for joint action given by this account could not significantly explain the development of an understanding of minds."⁹³ This is a role Bratman shared intention supposed to play.

3.3.1.3 Joint action structures relevant bargaining

What does Bratman mean when he says, to coordinate planning and to structure bargaining concerning plans? In individual planning agency, intentions coordinate the planning of an individual. In the same manner, intentions coordinate the planning between agents in shared agency. Planning can be compared with a navigator map a driver sets to direct his destination. He follows the direction of the navigator map from the place of departure to the place of arrival. Therefore, planning is a practical reasoning from the moment of deliberation, that is, when the intention is formed, to the end of the intention, that is, the execution of the planning. Now the functional roles of shared intention have been explained as to coordinate planning and to structure bargaining concerning plans. How does it relate to reading the minds of others, which is, having the intentions about others' intentions? Butterfill maintains that to coordinate planning and to structure bargaining does not require intentions which refer to other

intentions in all cases especially in a familiar background of shared preferences, habits and conventions. In everyday life, plans are often coordinated on the basis of such a familiar shared background. In such a familiar background, a familiar conversation about research is discussed on a regular basis.

However, there are some cases where coordinating & structuring bargaining will require monitoring or manipulating others' intentions. For instance, where there are novel aims, unusual circumstances, unfamiliar partners and unfamiliar background. Butterfill asks "whether Bratman's account captures a notion of joint action suitable for explaining the early development of children's abilities to think about minds. Some of the joint actions which young children engage in involve novel aims, and some involve unfamiliar partners."⁹⁴ This means that joint actions here require the ability to form intentions about others' intentions. Joint actions presuppose psychological concepts whose development they should explain and obviously, the early joint actions of children cannot involve the shared intention according to Bratman's account. It is on this note that Butterfill maintains thus;

So given the premise that joint action plays a role in explaining early developments in understanding minds, it cannot be the case that the joint actions children engage in as soon as they engage in any joint actions involve shared intentions as characterised by Bratman.⁹⁵

Butterfill concludes his objection thus, "Bratman's account does not characterise a kind of joint action which could play a role in explaining how children come to understand minds."⁹⁶

3.3.2. Elizabeth Pacherie

In a sentence, Elizabeth Pacherie summarizes the shared intention theory of Bratman as “an account targeting small-scale shared intentional activity by suitably cognitively sophisticated agents in situations where they are in a position to mutually influence their intentions and related attitudes.”⁹⁷ She praises Bratman’s shared intention theory which is based on “small-scale shared intentional activity by suitably cognitively sophisticated agents in situations where they are in a position to mutually influence their intentions and related attitudes.”⁹⁸ He builds his theory on the individual intentions which interlock. Since the participants interlock their intentions, Elizabeth observes that Bratman distinguishes it from mere collective action and mental state.

However, she remarks that although Bratman uses ordinary intentions and normativity of individual planning agency which are accessible to everybody but the conditions he formulates are too sophisticated, and therefore accessible only to sophisticated minds.

Another limitation to the scope of Bratman’s accounts comes from the fact that in his construction, the materials come cheap (it makes do with ordinary intentions and with the normativity already present in individual planning agency), but their assemblage is costly and demands cognitively sophisticated agents.⁹⁹

According to her, Bratman’s analysis requires that the participating agents have a mental capacity which requires that each participant should represent the intentions and attitudes of the co-participants and both mutually represent that which is relevant to the joint activity. It requires full-fledged meta-representational abilities insofar as the contents of the intentions of each participant make reference to both their own intentions and the intentions of the other participants. The imposition of such strong cognitive requirements would imply that animals and small children, who lack altogether or have not yet fully developed mental and meta-

representational abilities as well as adequate mastery of the norms of practical rationality associated with planning, cannot share intentions and engage in joint action.¹⁰⁰

She observes that Bratman's ambition is "to offer sufficient conditions for shared intentions rather than necessary and sufficient conditions, allowing therefore for the possible alternative constructions and leaving open the possibility that shared intention is simply realisable."¹⁰¹ However, she argues that the conditions he states are not a *conditio sine qua non* because "there are situations where agents cannot influence others' intentions and thus where some of the conditions specified by Bratman cannot be met and where joint action is nevertheless possible."¹⁰² For instance, children lack the capacity of meta-representation and the capacity to influence others' intentions and attitudes, nevertheless they engage in joint activities.

She argues that the first condition of Bratman's shared intention theory "is not the condition that is supposed to account for the joint-ness of the activity in the strong sense in which we are interested."¹⁰³ This means that the condition Bratman states is not strong enough, although it ought to be. However, if it were strong enough, it would have been circular, but Bratman wants it to "be understood in a way that is neutral with respect to shared intentionality."¹⁰⁴

Bratman makes the second condition the hub of his shared intention theory instead of the first condition. "It should also be noted that conditions (3), (4) and (6) is derivable from condition (2) taken together with the norms already associated with individual planning and acting."¹⁰⁵ She remarks that the first condition encroaches into another person's actions and the second condition likewise encroaches into another person's intentions. Thus, both conditions do not respect another person's actions and intentions because each of the participants believes that he influences the intentions and actions of his co-participants through persistence interdependence.

According to Bratman, there is a difference between intending that and intending to. Intending that is a condition that is possible, that has an

influence while intending to means a condition that is necessary, not just possible. So what Bratman means, is a condition that is possible, that has influence and not necessarily a violation into own action condition.

3.3.3 Henrike Moll and Michael Tomasello

Henrike Moll and Michael Tomasello in their work, "Cooperation and Human Cognition: The Vygotskian Intelligence Hypothesis," describe the cooperative activities of chimpanzees. Chimpanzees demonstrate joint cooperative activities especially in group hunting activities even though they lack the capacity to the robust theory of mind. Boesch and colleagues describe their observation on Chimpanzees' group hunting exercise in Tai forest. According to these researchers, the chimpanzees

(T)ake complementary roles in their hunting. One individual, called the driver, chases the prey in a certain direction, while others, the so-called blockers, climb the trees and prevent the prey from changing directions. An ambusher then silently moves in front of the prey, making an escape impossible. Of course, when the hunting event is described with this vocabulary of complementary roles, then it appears to be a joint cooperative activity: complementary roles already imply that there is a joint goal, shared by the role takers.¹⁰⁶

This is a group activity intentionally strategized because of their joint goal which is their shared intention. In their cooperative and mutual responsiveness, they position themselves properly and each Chimpanzee chases the prey from his own position and also fills whatever spatial position which could be an escape route that is still vacant at any given time. Through this strategy, they encircle their prey and accomplish their goal. Therefore, the Chimpanzees have the capacity to joint cooperative activities even though they lack Bratman's robust theory of mind.

Chapter 4.

Evaluation

Bratman builds his intention condition on I intend that we J and you intend that we J. This simply means that the intention condition requires the interlocking and reflexivity of the intentions of the participating agents. However, coordinating plans with other participating agents do not necessarily in principle require the interlocking and reflexivity of the intentions of the participating agents. Most of the plans of our shared intentional activities are coordinated mostly based on the background of familiar agents (such as relatives, friends, colleagues, etc.), the same cultural background, already established institutions, etc.

Jon Barwise believes that there is a close relationship among common knowledge, mutual belief and shared information such that these three are beneficially studied together. According to him, "the pioneering work of Dretske has shown knowing, believing and having information are closely related and are profitably studied together."¹⁰⁷ However, he believes that an agent who knows some facts is stronger than an agent who possesses the information. "Knowing is stronger than having the information."¹⁰⁸ This is because he believes that an agent who knows the information possesses two capacities of both knowing the information and of having the ability to act based on the information she knows. He gives an example to illustrate clearly her point. "If I see the tallest spy hide a letter under a rock, then there is a clear sense in which I have the information the tallest spy has hidden letters."¹⁰⁹ In this case, it is distinct that I know him as a spy and also as the tallest among other spies. Furthermore, I see him hide the letter. But what is common knowledge?

The term common knowledge is highly problematic since different kinds of account have been given in different fields like

logic, artificial intelligence, game theory, law and argumentation. We can notice, however, that the models of knowledge stemming from logic cannot be actually applied. While in logic common knowledge is analysed as necessarily connected to truth, in artificial intelligence (AI) systems and law it is described as provisional, leading only to defeasible inferences.¹¹⁰

"It is argued that common knowledge is a species of provisional acceptance of a premise that is not in dispute at a given point in a dialogue but may later be defeated as the discussion proceeds."¹¹¹ This means that if agents believe x to be true, then x is accepted and known to be true. "Belief does not imply truth. It only implies that the agent believes that the statement in question is true. In this sense, something is common knowledge if everybody believes that it is true, everybody believes that everybody that it is true and so forth."¹¹² Then if common knowledge is based on the belief of the people, it is an opinion of the people and not based on scientific facts. It then points to show that common knowledge is therefore subjective instead of objective. It can be said that what Bratman calls common knowledge is a proposition that is generally accepted by the group concerned. In the same vein, "something is said to be common knowledge among a group of agents if all know it, all know that all know it, and so on."¹¹³

The argument of cooperatively neutral which Bratman presents to avoid circularity, however, weakens the strength of the shared agency. According to Bratman, "you and I each intend that we perform (cooperatively neutral) the joint action."¹¹⁴ By cooperatively neutral in shared intentional actions, he means those actions that may be done cooperatively but need not be. This means that they could be done by a group of some people coming together and forming the intention to do so or could also be done by an individual alone. So there is no necessity that it must be a group of intentional action. He gives some examples with singing a duet, painting a

house together, walking together, washing dishes together, moving a table together. These are cases that can be done either as a group or as an individual. That is why he calls it cooperatively neutral. Since the shared intention could be cooperatively neutral, it is not a joint intention in a strict sense because it weakens the strength of his resulting notion of collective action.

Bratman argues that the intention condition, belief condition, interdependence condition, common knowledge condition and mutual responsiveness condition provide sufficient conditions for shared intention and modest sociality. However, the intention condition which is the first among the sufficient conditions interlocks and reflexes with the intentions of the participants. So Bratman makes his argument open by giving sufficient conditions for modest sociality instead of necessary conditions. What does he mean by giving it a sufficient condition instead of a necessary condition? In this case, his argument is indefinite and open.

This sufficient conditions of Bratman's shared agency require a robust theory of mind. It is therefore very complex and not suitable for every intending agents. It can be said that his shared agency is not all-embracing but exclusive and suitable only for those who have the capacity to the robust theory of mind.

According to Björn Petersson, suppose I want the window smashed. When I note your presence on the street, I think that if you act in a certain way, the window can be smashed as a result of both our acts and I form an intention accordingly. What I intend in that case is merely to get the window smashed, while predicting that your actions will be components in the process leading to that result. This prediction may rest upon my knowledge that your intentions are similar to mine and that our subplans are likely to mesh in a way that enables me to reach my goal. There are mutuality and interdependence, in line with Bratman's requirements but there is no explicit knowledge about the intentions of the two participants.¹¹⁵ It basis only on predicting that the co-participant will be mutually responsive.

Therefore, this you and I window-smashing does not prove that there is a shared intention according to Bratman's argument on the shared agency. Björn Petersson argues that there can be a collectivity without shared intention as a solution to circularity challenge. He uses Hurley's argument for a collective unity of activity where the agents have the capacity to identify with other agents as a part of a whole in a collective unity of activity. The agents have causal powers or dispositions through which they perfect their capacities. Thus, they are called causal agents. This is very evident in ant colonies or a swarm of bees. Since there are collectivity and interdependence although without intention like the case of ant colonies and a swarm of bees, the human agents can also be causal agents basing their operations on collectivity and interdependence and still without sharing intention.

Thus, Bratman could also use Hurley's argument for a collective unity of activity since the agents have the capacity to identify with other agents as a part of a whole in a collective unity of activity. Furthermore, the agents have causal powers or dispositions through which they perfect their capacities and thereby making them capable of collectivity and interdependence although without intention. In this case, the problem of circularity is avoided and yet there is shared intention.

However, Bratman makes reference to this concept when he says that we can regard groups of humans as causal units of activity. He shows how his theory can accommodate groups of this kind. "But it does not follow that the contents of their intentions in the basic case must include a further, primitive idea of a group causal agent."¹¹⁶ In this case, the participants regard their group as a unity of activity

When people share intentions together, there are always obligations that go with them. Each agent believes that the other will fulfil her own part of the intention and depends on her to play her part. So they depend on one another. It is in this sense of mutual interdependence that Bratman speaks about the norms, not in a moral direction but as expectations among the agents; what they will do and how they will do it. It is on the basis of these

belief and the mutual expectations that people go into a shared intention. Yes, Bratman believes that the agents will fulfil the expectations. And he discusses exhaustively the useful conditions that are necessary for individual shared intention but he does not consider the two sides of the human possibilities to cooperate and to fail to cooperate which we experience in our daily lives. Experiences have shown that human beings have not always cooperated even siblings, couples, friends, parents with their children, etc. This is because human weaknesses or self-interests have always weakened or influenced individuals and most of the times at the expense of the common good.

Furthermore, Bratman does not give room for leadership in his modest sociality. He describes it as a small-scale stable group of agents acting together with no hierarchical relationship among the participating agents. He believes that every participant will do his part without any form of external motivation or influence. However, I have tried to remember and also to imagine any serious engagement even between two participants that have no leader or someone who has more influences on his co-participant but I cannot remember and imagine one. In every shared intention, there is always somebody who plays a major role. This person could be assumed as a leader.

Chapter 5

Conclusion

Acting together is one of the strategies for the survival of rational agents. Complex tasks are easily accomplished because various inputs are harnessed together. Michael Bratman, John Searle, Margaret Gilbert and Raimo Tuomela all agree on the resourcefulness of the collective theory but they have different approaches to it.

Acting together by the agents takes the shapes of either as strategic thinking or as group agency. In strategic thinking, an individual agent applies mental energy in order to achieve her goal but in group agency, the participating agents think and act as a collective entity. It is between these two extreme shapes of acting together that Bratman develops his theory of modest sociality. His target is to avoid strategic thinking on the one side and group agency on the other side.

He is not satisfied with the strategic thinking. He considers it inadequate because it does not provide intentional interpersonal relationship. Then he considers that the group agency is not necessary because it does not provide independent intentions among the agents. Therefore, he proposes the modest sociality which is the middle of the two extremes. We can then say that his theory has two capacities; first it connects individual agents closer than strategic thinking and secondly, it avoids group agency. He argues that the modest sociality is the most suitable amongst the joint intentional theories because neither strategic thinking nor collective agency is required. So Bratman is careful in laying the building blocks of modest sociality so that it does neither collapse into strategic thinking nor collective agency. In trying to avoid the extreme of strategic thinking, he formulates persistent interdependence of intentions among the participants. And in order to avoid collective agency, he formulates independent intentions of each of the participants. It can also be said that Bratman lays the building

blocks of his modest sociality on the states of two extreme groups; the persistent interdependence of intentions of the participants acting together and on the independent intentions of each of the participants.

Therefore, modest sociality plays a unique role. It establishes a persistent interdependence among the intentions of the participating agents. Each agent forms her independent intention. When these participating agents come together with their formed intentions, there are interlocking and reflexivity by way of relevant mutual responsiveness in sub-plans and actions. It could be said that they mesh them together like adoptive assimilation. Even though their independent intentions are not uniform, they are properly assimilated so that each of the participating agents still achieves her subplans in addition to the shared intention. Thus, in modest sociality, the intentions originate from the individual agents before meshing together. This is a unique characteristic of modest sociality. Therefore, since the intentions originate from the individual participating agents, they are based on mutual interdependence and as such there is no room to collapse on either strategic thinking or group agency

When people come together for important business, there are always commitments subject to the norms that guide them because they rely on one another to succeed. Bratman argues that the commitments in a shared agency are based on the intention condition. He believes that the participants to shared intention, because of their intentional interlocking and reflexivity, will be mutual responsive to one another due to their common knowledge and mutual interdependence.

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Abstract

Michael Bratman's work, 'Shared Agency, A Planning Theory of Acting Together,' is one of the most important philosophical arguments on the theory of action and group agency. Bratman calls it the planning theory of modest sociality which he describes as a small-scale stable group of agents acting together with no hierarchical relationship among the participating agents. He builds his argument on his intention condition theory, 'I intend that we J,' in which the 'we J' is shared intentionally among the participants. This work is notably an extension of his individual planning agency. That is why he calls a continuity thesis from individual agency to shared agency. However, there are three major objections arising from his work; the problem of circularity, the problem of common knowledge and that children and animals cooperate successfully even though they lack robust theory of mind required by his argument. In this thesis, I summarise his argument and discuss these three major objections.

Abstrakt

Michael Bratmans Arbeit 'Shared Agency, A Planning Theory of Acting Together,' ist eines der wichtigsten philosophischen Argumente zur Handlungstheorie und Gruppenhandlung. Bratman nennt es die Planungstheorie der bescheidenen Sozialität, die er als eine kleine stabile Gruppe von Agenten beschreibt, die ohne hierarchische Beziehung unter den beteiligten Agenten. Er baut seine Argumentation auf seiner Intentionsbedingungstheorie "ich beabsichtige, dass wir J" auf, in der das "wir J" absichtlich unter den Teilnehmern geteilt wird. Diese Arbeit ist vor allem eine Erweiterung seiner individuellen Planungsagentur. Deshalb nennt er eine Kontinuitätsarbeit von Einzelagentur zu geteilter Agentur. Es gibt jedoch drei wesentliche Einwände, die sich aus seiner Arbeit ergeben; das Problem der Zirkularität, das Problem des Allgemeinwissens und dass Kinder und Tiere erfolgreich zusammenarbeiten, obwohl ihnen eine robuste Theorie des Verstandes fehlt, die von seiner Argumentation verlangt wird. In dieser Arbeit fasse ich seine Argumentation zusammen und diskutiere diese drei Haupteinwändepunkte.