28, familiar with Protégé, PhD 1st year

(M)

00:25 ok, emm, so I think I will first draw like a diagram to see what’s the problem here, so

I: sorry, I need to use it for other participants, you can’t draw here, and you put here, but now you see, you have these two kinds of things, so I would prefer you just based on these ones

01:23 ok, so, emm, so I think the problem here is that em the range of this property is superpower, but then here (pointing to the right hand side of dash arrow) we say that em the range god device would, which is disjoint from superpower

I: yea, and how would you fix it

01:58 so, either remove the disjoint axiom, or emm, or remove the range restriction

I: anything else?

02:27 Yea, that’s all

02:33 then, this is the 2nd one, and these two are unsatisfiable, just tell me how would you fix it?

03:03 emm, I’m not sure what’s the problem here

I: oh, then you can take a look at the diagrams and maybe that can help you to understand that

03:52 ok, ah ok, ya, so the problem here is these two max and exactly 5 are contradictory,

04:18 and so to fix it, either to make them all same, so make this emm, e.g. Here change the max to emm, to em only or some, some, change the max to some in here, so has member something, emm, or we can change emm, or we can em, I’m not sure if,

I: yea, just try

I mean if we remove the subclass relationship

I: em which subclass?

Iceman subclass of costumed

05:26 I: ok, that’s it?

05:33 I: the next one

So we said here that hero is disjoint from em multipower, but at same time it’s emm, GWMultiPower is sub, yea, so we said disjoint from this one, and this one (means GWMultiPower) is sbuclass of girl with power, and girl with power is subclass of hero, so the disjoint, so this is wrong

06:41 so either to remove the disjoint, or emm, to remove this girl with power subclass of hero, to remove this axiom

06:56 I: this one

07:22 ah so here also with so that the range of absorbs is fire and emm, fire subclass of matter, and energy disjoint with matter, and we have here so with fire and abs, so with, with emm, something in energy, which is disjoint from this one, emm, so to remove the range, or again also remove the disjointness between them

08:07 I: that’s it?

08:11 I: (giving a new one)

08:45 ok, so, this means they are disjoint, aren’t they? So we have this property here (means has base in) that link bear to cave, and this is the inverse which link bear, and this one (pointing to the third diagram aeroboat) should be like cave, and we said it, it’s another thing which is disjoint from cave and that’s, what the problem is

09:46 so either to remove the disjoint axiom, emm, yea, but, I mean, we can remove the inverse of, but they are, I think the inverse, we should keep them the inverse of, because,

I: that’s the model

Yea

10:20 I: (giving a new one)

10:36 so from the diagram, we have ah here, ah some, and here only,

I: em this is a domain

Oh ok

I: but also only, you are right

Cache subclass of, it’s complicated, the,

I: but I think your first thought, this is the some, this is the only, is correct

Oh, yea, so we can say that things is owned, is emm, sorry which is some and which is only?

I: this is some, this is only

Yea, so we are, so we are saying here that everything must at least has one, is owned by one thing, and he, and he, em and here human race which is subclass of some, of thing, we say it’s can, ah no, so this is, only means, emm,

I: only information centre

Yea, and here some mean at least one, so I don’t know, these two I think they are not contradictory,

I: are you sure?

Everything is fine, emm, so maybe the problem, in the range?

I: here, is the inverse of a property, so this part is the domain,

Domain, yea, so I think the problem is in the domain, aah, I’m not sure for this one.

I: ok, so here, it says that only information centre is owned by something, but here, it says that armory is owned by something, there are one part of armory is disjoint with the info centre, so info centre’s domain must be, sorry, is owned by’s domain is info centre, but here there is one part of something is outside the domain, is still linked with, linked by is owned by, so there say there must be something wrong with the cache

Ah, yea, I get it

I: so how would you fix it?

16:18 emm, so to remove the domain axiom, yea

16:40 I: (giving a new one)

17:21 so we said here that every individual of each must at least have em, no, at most have is member of with, with aah, something, and here we said this, this thing is emm, subclass of robot, and here we said it’s subclass of human team, and human team and robot are disjoint, so emm,

17:57 to remove the disjoint axiom, or emm, to remove the sub, the subclass axiom (means the axiom 1), I think this is better, I’m not sure which is better

I: yea, it really depends on the model, so you can just give some options, ok, good

On the purpose of ontology

I: this is the last one, and that is very complicated one, so some people even think that there is no problem with the statements, so just please look at the diagram and the statements, and try your best, and if you cannot give any solution, you can just tell me there is no solution for this one, we just want to check, because these axioms I took one or two days to figure out why this is unsatisfiable, so we just want to know whether our diagram can really help with it, so you can just based on the diagram and give me some solution

19:40 I mean from the diagram, this is emm, this (pointing to the unlabelled curve inside Villain at the diagram) is like the intersection between them, between these two classes, but emm, there is no intersection between them, so, so,

I: so that means this circle could be something either in here, or in here

Emm, ok, but they’re disjoint, so this is the problem,

I: ok

So this is either from here (the part of people inside unlabelled curve) or here (the part of others inside unlabelled curve), ah emm, ok, I’m not sure

I: ok, we can forget it

22:05 no I think it’s em it’s similar because are we usually draw diagrams to, if we have, so I usually draw diagrams to, if I get unsatisfiable class, draw diagrams to typograph (?) what the problem is. Usually when we have domain and range, aam, so, be helpful, if, if, I mean if you used to the representation

22:48 Emm, so as I said, drawing diagram, em, trying by removing some axiom and then redo if, if nothing happen

23:08 yea, I think it could be useful, but emm, I’m not sure these emm square and sub-square, so it’s a bit confusing, and emm, yea, so, and, I think it would be, if you have, these axioms are short axioms, but if you have, like more axiom, 10 axiom, and if you try to represent them in, in a diagram, and even if you want to look at diagram, I think it would be complicated.

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| **Task id by unsatisfiable** | **Solutions** |  |
| **(Mul)** Thunder | (1) delete axiom 4: SuperPower DisjointWith Device  (2) delete axiom 1: isEnhancedBy Range SuperPower | R |
| **(Mul)** Costumed, Iceman | (1) change max 4 to some  (2) delete axiom 2: Iceman SubClassOf Costumed | R for (1), but not for (2) |
| **(Mer)** GWMultiPower, GWSuperSenses | (1) delete axiom 4: Hero DisjointWith GWMultiPower  (2) delete axiom 3: GirlWithPower SubClassOf Hero | R |
| **(Mer)** Wood | No solution | R |
| **(Mer)** absorbs | (1) delete axiom 1: absorbs Range Fire  (2) delete axiom 6: Energy DisjointWith Matter | R |
| **(Mul)** Aeroboat | Delete axiom 4: Cave DisjointWith Aeroboat | R |
| **(Mul)** isMemberOf | Delete axiom 1: Thing SubClassOf isMemberOf only Robot  Delete axiom 5: HumanTeam DisjointWith AlienTeam | R |
| **(Mer)** Cache | (1) delete axiom 5: InfoCentre DisjointWith RnDCentre  (2) delete axiom 4: Armory SubClassOf isOwnedBy some HumanRace | R |